

NURSE PRACTITIONERS' PRIORITIZATION OF  
BREAST HEALTH PROMOTION  
AMONG MARGINALIZED WOMEN: A PILOT  
STUDY FROM THE EAST TENNESSEE REGION

A Thesis

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ABSTRACT

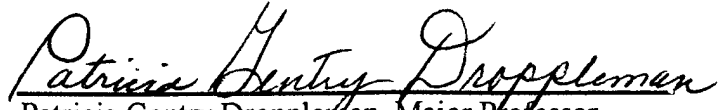
The purpose of this study was to examine the prioritization nurse practitioners place on breast health knowledge among marginalized women. A voluntary convenience sample ( $N = 167$ ) of nurse practitioners currently working in the east Tennessee region of the United States completed questionnaires containing five vignettes describing marginalized women followed by twelve education topics that nurse practitioners prioritized.

Results of the study showed no significant difference between the promotion of breast self examination and mammography among nurse practitioners working in the public ( $n = 36$ ) or private ( $n = 113$ ) clinic settings or between specialties of family health ( $n = 106$ ) or women’s health ( $n = 30$ ). However, public health setting nurse practitioners significantly ranked annual clinical breast examination higher than the private setting nurse practitioners ( $p = 0.03$ ). The promotion of an annual examination may convince women to return so other necessary annual screenings may be carried out such as Pap smears or colon cancer screenings. In addition, women’s health nurse practitioners were more likely to promote this health teaching ( $p < 0.05$ ).

A comparison of the responses by all the nurse practitioners revealed a disparity among the prioritization of breast health among the vignettes. In a pairwise comparison it was found that nurse practitioners were more likely to promote breast health teaching in the vignettes describing low socioeconomic women who were African-American, Latina, and lesbian and least likely in vignettes describing women who were homeless or HIV positive. The implications for nursing practice suggest extension of appointment time allotments for these marginalized women to ensure breast health teaching according to American Cancer Society guidelines.

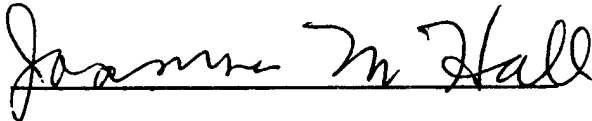
To the Graduate Council:

I am submitting herewith a thesis written by Candy Wilson entitled "Nurse Practitioners' Prioritization of Breast Health Promotion Among Marginalized Women: A Pilot Study from the East Tennessee Region." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nursing.

  
Patricia Gentry Droppleman, Major Professor

We have read this thesis and  
recommend its acceptance:

  
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Accepted for the Council:

\_\_\_\_\_  
Associate Vice Chancellor and  
Dean of The Graduate School

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## DEDICATION

To the beautiful women who have touched my life: my mother, Carolyn; mother-in-law, Ann; sisters, Sally and Dawn; and my precious daughter, Amber. You will always be my driving force for giving the best care I can for the women I will see in my practice.

To my husband, David, thank you for your undying love and affection.

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Words cannot express all the gratitude I have for the support and guidance I received from my thesis committee

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Cary Springer, my statistical consultant, made the numbers work. Her statistical wizardry helped immensely and proved to me that it is always best to seek an expert and not give up.

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## ABSTRACT

The purpose of this study was to examine the prioritization nurse practitioners place on breast health knowledge among marginalized women. A voluntary convenience sample ( $N = 167$ ) of nurse practitioners currently working in the east Tennessee region of the United States were sent questionnaires containing five vignettes describing marginalized women. Twelve education topics (immunizations, nutritional concerns, importance of regular exercise, smoking cessation, weight reduction, heart disease prevention, osteoporosis prevention, mental health screenings, annual pap smears, monthly breast examination, annual clinical breast examination, and mammography) followed each vignette and nurse practitioners prioritized teaching according to the vignette.

Results of the study showed no significant difference between the promotion of breast self examination and mammography among nurse practitioners working in the public ( $n = 36$ ) or private ( $n = 113$ ) clinic settings. However, a statistically significant difference ( $p = 0.03$ ) between the public and private clinic nurse practitioners in regard to promoting clinical breast examination was discovered. Public clinic nurse practitioners more highly promote the importance of this screening.

Next, a comparison between practice specialties was conducted with a sample of family health ( $n = 106$ ) and women's health ( $n = 30$ ) nurse practitioners. There was no significant difference between the groups in the promotion of breast self-examination and mammography. However, there was a significant difference in the promotion of clinical

breast examination. The women's health nurse practitioners were more likely to promote this health teaching ( $p < 0.05$ ).

A comparison of the responses by all the nurse practitioners revealed a disparity among the prioritization of breast health among the vignettes. In a pairwise comparison it was found that nurse practitioners were more likely to promote breast health teaching in the vignettes describing low socioeconomic women who were African-American, Latina, and lesbian. The nurse practitioners were least likely to promote breast health teaching in the vignettes describing women who were homeless and/or HIV positive.

Nurse practitioners who work in public health settings more highly rank the importance of an annual clinical breast examination than private setting nurse practitioners. Public health nurse practitioners often minister to women who are transient; the promotion of an annual examination may convince women to seek care so that other necessary annual screenings may be carried out such as Pap smears or colon cancer screenings. Since the women portrayed in the vignettes were of limited financial means, nurse practitioners may be aware that these women are least likely to receive annual breast examinations.

Women who are homeless or HIV positive have many needs in regard to health teaching. Since nurse practitioners reported a lower priority with this aggregate of homeless or HIV positive women it may be assumed that nurse practitioners will prioritize various necessary health teaching according to specific identifying factors. The implications for nursing practice suggest extension of appointment time allotments for these marginalized women to ensure breast health teaching according to American Cancer Society guidelines.

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## CHAPTER I

### INTRODUCTION

American women have a one in eight lifetime chance of developing invasive breast cancer (Landis, Murray, Boldern, & Wingo, 1999). Second to skin cancer, breast cancer will account for 29% of such diagnoses in 1999 (Landis, et al.). Breast cancer is the second leading cause of cancer death following lung cancer among women (Wyn, Brown, & Yu, 1996). According to the National Cancer Institute (1999), Caucasian women living in the United States have the highest rates of diagnosis of breast cancer, whereas Korean women have the lowest. Even though current statistics suggest a decline in the mortality of Caucasian women from breast cancer, Flaws, Newschaffer, and Bush (1998) raise the caution that this may represent solely a temporal artifact. According to the authors, similar declines are not found across racial boundaries. The article states that the mortality rate of breast cancer among African-American women has increased 53% from 1950 to 1992. As a result, African-American women have the highest mortality rate from breast cancer and Chinese American women have the lowest, 31.5/100,000 compared to 11.6/100,000 (Landis, et al., 1999). In the U. S., the difference between African-American and Caucasian women is statistically significant when comparing five-year survival rates. African-American women have a 71% five-year survival rate whereas Caucasian women have an 87% survival rate (Landis, et al., 1999).

In the Commonwealth Fund Survey, Wyn, et al. (1996), found that despite recent optimistic survival trends, as the incidence of developing breast cancer

increases the number of women who pursue and receive the appropriate breast cancer screening decreases and is especially true among underserved populations. Kerner (1996) in a review of recent breast cancer prevention research found that “poor women, less educated women, women of color, women who don’t speak English, and older women are often severely under-represented, if represented at all in [epidemiological] studies” (p. 2).

### National Guidelines for Screenings

The American Cancer Society (ACS) has outlined optimal breast health guidelines. These recommendations include: (a) monthly breast self-examination for women over the age of 20, (b) clinical breast examination every three years for women 20-39 years old and every year for women over 40, and (c) annual mammogram after the age of 40 (1998). The ACS reports the mortality rate from breast cancer can be decreased in women who practice good breast health according to the age specific guidelines.

Health care experts agree about the benefits of clinical breast examination (CBE) and mammography for women between the ages of 50–69 (Wyn, et al., 1996). Chevarley and White (1997) stated “the declining mortality from breast cancer among Caucasian women under age 60 over the last 2 decades may be due to a combination of decreasing inherent risk of breast cancer, increasing effectiveness of treatment, and the benefits of early detection” (p. 777). However, the U. S. Preventive Services Task Force (1996) does not support or refute the benefits of

CBE or BSE. Additionally, the Task Force comments on the increased incidence of false positive examinations with BSE and CBE that result in supplementary testing, whether that consists of an office visit for CBE or a mammography. Alternatively, the National Women's Health Information Center states that 70% of breast cancers are detected through breast self-examination (BSE) or an incidental finding by patient.

### Overview of the Problem

Clearly, disparities in adherence to the regular practice of breast health screenings exist between specific populations. How can one predict the practice of regular BSE and commitment to annual CBE and mammograms among a broader range of women, who differ on the basis of socioeconomic class, ethnicity, and/or access to care? More specifically, what factors encourage or discourage these practices among marginalized women? Perceptions about disease and prevention practices differ among cultural, ethnic and socioeconomic status groups of women, issues that the following text highlights. However, research regarding the adherence to proper breast health screening according to ACS guidelines involving lesbian women and homeless women is equally lacking.

### Perceptions of Breast Cancer

Cultural views of illness can contribute to an underutilization of preventive services. Interviewing 26 African-American women with various income levels,



Phillips, Cohen and Moses (1999) found that many considered breast cancer as a “Caucasian woman’s disease.” Moreover, the diagnosis represented a death sentence, rendering care-seeking a moot issue (Phillips, et al.). In a narrative analysis of an African-American woman dying of breast cancer, she revealed to researchers that she felt the breast cancer was a result of years of physical and sexual abuse she had endured (Lawson, 1998).

Other authors have also studied socioeconomic and cultural influences among women who present with late stages of breast cancer, defining late stages as TNM (tumor-node-metastasis) stage IIB (>5 cm tumor), III, and IV (Lannin, Mathews, Mitchell, Swanson, Swanson, and Edwards, 1998). Lannin et al. concluded that low-income, per se, put many African-American women at increased risk for late stage breast cancer. They likewise found that factors such as cultural beliefs and attitudes increased the likelihood of late stage breast cancer. Some cultural beliefs revealed in this study were: (a) cancer exposed to air will spread; (b) the devil is responsible for the cancer; (c) men will no longer find them attractive if cancer is diagnosed; and (d) chiropractic care is effective in treatment for breast cancer (Lannin).

#### Covariants for Morbidity

Genetics are a factor in the likelihood of a woman developing breast cancer and genetic testing should be made available for women who wish to seek this testing. If genetic testing services are made available, regardless of culture, women

will choose a preventive stance. Women of diverse cultures expressed interest in having genetic testing done for breast cancer genes, BRCA1 and BRCA2 (Durfy, Bowen, McTiernan, Sporleder, & Burke, 1999). Durfy et al. also stated that if the results revealed an increased likelihood of having cancer, the women stated that they would increase their screening activities.

Existing research supports ACS recommended action (BSE, CBE, and mammography). African-American women have a statistically lower incidence of breast cancer, however, they will more than likely succumb to the disease when compared to Caucasian women (ACS, 1998). Manton and Stallard (1997) point out that the first four risk factors are universal among all races of women (age at first birth, parity, surgical menopause, and benign breast disease). A first-degree relative diagnosed with breast cancer also increases risk (Leslie, 1995). However, differences among the races surfaced in comparison to early menarche, contraceptive use, and smoking among African-American and Caucasian women, which can put women at increased risk for breast cancer (Manton & Stallord). Manton and Stallord noted that African-Americans and Hispanics are more likely to have aggressive tumors that spread more rapidly than Caucasian women.

Reproductive factors do not seem to cause breast cancer risk disparities between African-American and Caucasian women. An increase of breast cancer can occur if the birth of the first baby occurs after the age of 30 or being nulliparous, regardless of race (Brinton, Benichou, Gammon, Brogan, Coates, & Schoenberg,

1997). This is also supported by the research from Manton and Stallord as stated earlier (1997).

As might be expected, women with higher educational levels have lower breast cancer mortality (Heck, Wagener, Schatzkin, Devesa, & Breen, 1997). This is usually related to the higher socioeconomic status of the more highly educated and greater access to health care. Unfortunately, however, more education protected Caucasian women only. Heck and researchers found that equally educated African-American women, as compared to the Caucasian group, experienced an increase in breast cancer mortality.

Newman and Alfonso (1997) found that African-American women appear to be diagnosed with breast cancer at a younger age and at a more advanced stage. Another important finding in the same study was that African-American women were more at risk for the advanced stages regardless of their socioeconomic status. In a survey conducted by the National Cancer Institute on Black-White survival, factors which increased an African-American woman's incidence of morbidity from breast cancer included: being single, having a lack of health insurance, and having an increased body mass.

Short stature appears to lower an African-American woman's risk of breast cancer, however, this same protective marker is not shared by Caucasian women (Palmer, et al., 1995). By comparing cases of 674 African-American women hospitalized for new onset of breast cancer to a control group of 1,155 African-American women hospitalized for nonmalignant diagnoses, variables such as age of

menarche, years of education, oral contraceptive use, and age at menopause (if applicable) were examined. Short stature (<61 inches) reduced an African-Americans risk of breast cancer by 50%.

African-American and Hispanic women have a shorter survival time with breast cancer than Caucasian women (Lyman, et al., 1996), and usually present with breast cancer at a younger age and in more advanced stages. Finally, Lyman, et al. state that "race and socioeconomic status appeared to be significant but independent predictors of outcome" (p. 87). Lannin et al. (1998) reported that African-American women were three times more likely than Caucasian women to present with late stage breast cancer. However, when Lannin et al. included the variables of race with socioeconomic or race with cultural factors the odds ratio dropped to 1.8. In a study by Eley, et al. (1994), comparing African-American versus Caucasian cancer survival rates found that the odds (hazard) ratio was 2.2 with race alone and 2.0 comparing race and socioeconomic status. Kerner (1996) suggests that addressing the needs of medically underserved populations will be complicated due to the presence of other disease processes that may not be managed effectively due to the lack of access to care and follow-up.

### Summary

The overview of the problem demonstrates the need for further research among other marginalized groups of women. The comparison of other large cohorts of women, for example, lesbian, and homeless is lacking. The literature review will

demonstrate studies done on women of various races, cultures, and socioeconomic status and the impact of the health care provider on the adherence to breast health screenings.

## CHAPTER II

### LITERATURE REVIEW

The alarmingly low number of women who practice good breast health measures varies among culture and ethnic groups. The following information will compare various diverse groups of women within the United States and around the world in terms of rates of BSE followed by CBE and mammography. The issues surrounding the lack of adherence to the American Cancer Society's recommendations will be divided into cultural, economic and other barriers.

#### Overview of Barriers

#### Breast Self-Examination (BSE)

##### Cultural Issues

Several studies have been done in order to examine ethnically diverse women's adherence to monthly BSE. According to a 1998 study by Mishra, et al., in the United States, 25% of Latinas perform BSE. Carpenter and Colwell (1995) surveyed 112 Mexican-American women who reported that three-fourths thought that they could not correctly perform BSE, however, 83% agreed that BSE is important for breast cancer detection. In another study of 512 Hispanic-American women, Skaer, Robison, Sclar, and Harding (1996) found that fewer than 25% of migrant Hispanic women over the age of 50 performed BSE. Skaer, et al.

determined that the Hispanic women who perform monthly BSE reported an annual income greater than \$5,000 and had been taught how to perform BSE. Researchers in a southeastern clinic studied 92 women and determined that 27% of low-income African-American women were performing monthly BSE (Duke, Sosby, Reynolds, & Gram, 1994). These women visited the clinic on an average of every three months for unrelated chronic illness; so frequent encounters with healthcare personnel may have elevated the likelihood of adherence to ACS guidelines. African-American women distressed about possibly becoming victims of breast cancer, appear to have a heightened diligence for BSE after a family member has been diagnosed with cancer (Hughes, Lerman, & Lustbader, 1996). Sortet and Banks (1997) found thirty-four percent of Caucasian Appalachian women reported performing monthly BSE.

Breast self-examination practices in different parts of the world appear to be low. Bhakta (1995) reported only 10% of Asian women living in London practiced BSE correctly. Wardle, et al. (1995) found a dismal 8% of women under the age of 30 regularly practice BSE in London. In an Australian survey, 27% of women reported regular BSE (Budden, 1995). Similar results from a study by Savage and Clarke (1996) determined that 28% of the Australian women in this sample conducted regular BSE. Persson, et al. (1995) reported that only 10% of a sample of Swedish women consistently performed BSE and only 12% of South Asian women living in Canada reported conducting monthly BSE (Choudhry, Srivastava, & Fitch, 1998).

### Economic Issues

The reported income of women does not appear to have a significant effect on adherence to monthly BSE in two studies. Salazar (1994) reported that 28% of a predominantly Caucasian working-class population reported regular BSE and a study of urban, low-income women reported regular BSE to be 21% (Lauver, Kane, Bodden, McNeel, & Smith, 1999).

### Additional Barriers to BSE

Existing data may be unreliable even though the proportion of women who say they perform monthly BSE falls between 8 and 34%, Olson and Morse (1996) found that women often report conducting BSE to their physician because they do not want the doctor "mad at them." Fear of repercussion from their health care provider may place a woman at risk. Lauver, Coyle, and Panchmatia (1995) studied barriers to performing BSE, once possible breast cancer symptoms appeared. Half of 119 study participants reported social commitments that expend time and energy (i.e. work, school, family), finances, and fear of what they may find as barriers to conducting monthly BSE (Lauver, et al.).

### Clinical Breast Examination (CBE)

#### Cultural Issues

Disparity among ethnic groups who receive CBE is evident in several studies. Hispanics have a lower rate of annual CBE than Caucasian and African-American women do, 56%, compared to 68% (Wyn, et al., 1996). In the study by



Choudhry, et al. (1998) they found that 42% of the 57 Asian women they studied who had poor English language skills, and were age 40 and older were less likely to have had a CBE.

### Economic Issues

Frazier, et al. (1996) determined the predictors for CBE screening among women of various races and cultures were marital status and an annual family income greater than \$35,000. In their sample, Frazier, et al. found that 10% of 22,657 diverse, older women had never had a CBE. Women with less education are less likely to have CBE possibly due to diminished access to care. Wyn, et al. (1996) surveyed 2,447 U.S. women and in comparing their educational levels that only 55% of women with less than a high school education had a CBE as compared to 75% of women with college degrees (Wyn, et al., 1996).

An income of less than \$25,000 per year greatly reduces a woman's opportunity for CBE. Fifty-eight percent of women with fewer financial resources are likely to have a CBE as compared to 75% of women with more money who will receive an annual examination (Wyn, et al., 1996). In another study only half of 585 African-American women with low-incomes who were surveyed in a large Florida city had a CBE (Mickey, Durski, Worden, & Danigelis, 1995).

### Mammography Usage

The benefits of an annual mammography have not been clarified for women between the ages of 40-49 and a universal mandate for this practice by health care providers has not been forthcoming (McPherson, Swenson, Jolitz, & Murray, 1997). McPherson, et al. studied 971 women and found that in this majority of Caucasian women (96%), tumors detected by mammogram were significantly smaller than tumors discovered by BSE, CBE or incidental findings. However, even with this robust finding of detecting smaller tumors, health care experts have not reached a consensus about the efficacy of routine mammography screening within the 40-49 age group (Wyn, et al., 1996). Conflict regarding the benefits of mammography examinations for midlife women has been aired in the popular media and has produced confusion among the consumers in this age group, therefore decreasing adherence to early regular breast health examinations (Morrison, 1996).

National surveys, such as the “Behavioral Risk Factor Surveillance System” by the US. Department of Health & Human Services help to describe those women who are likely to have mammograms (1999). Demographics for the 62,278 women studied spot lighted a population primarily consisting of Caucasians and non-Hispanics, who had an annual income of between \$10,000-50,000, had graduated from high school, and were covered by health insurance. The results revealed that there has been an increase in the number of women having a recent (since 1989) mammogram. Ethnic comparisons of Caucasian, African-American, and Asian American/Pacific Islanders studied demonstrated that relatively the same rates

(about 72%) of having had a recent mammogram. However, women with less income and less education who were without health insurance were less likely to have had a current mammogram.

### Cultural Issues

Non-proficiency with the English language constitutes a barrier for Asian women (Choudhry, et al., 1998) and indeed only half of their sample ever had a mammogram in their lifetime. Women who utilize health departments as their source of health care have expressed additional barriers to completing routine mammography screening (Crane, Kaplan, Bastani, & Scrimshaw, 1996). Crane and colleagues speculate that women who attend health department clinics may fear that they will be reported to immigration authorities in addition to other barriers related to care such as transportation to and from the clinic and fear of possibly being diagnosed with cancer.

The accuracy of patient reporting date of their last mammogram is significant in determining adherence to ACS recommendations and the availability of previous mammogram for comparison is necessary for determining any significant changes in the breast. Hispanic and African-American women in a 1996 study were less scrupulous about the accuracy of self-reporting of previous mammogram (Zapka, et al.). These researchers attribute discrepancies to differences in care-seeking patterns since these low-income women received only sporadic services from free clinics.

African-American women are two times less likely than Caucasian women to have a mammogram recommended to them by a physician (Jones, Kasl, Curnen, Owens, & Dubrow, 1995). The authors noted that the African-American women they studied who were already diagnosed with breast cancer were disadvantaged when compared to Caucasian women in relation to socioeconomic status, education, family income, and occupational rating and further speculated that these socioeconomic factors may prevent them from seeking screening. Furthermore, 43% of these 145 African-American women had never had a mammogram, although, more of these women were diagnosed with cancer during the premenopausal period. According to the ACS guidelines, mammography screening is not recommended until age 40. Jones, et al. study should be replicated in order to demonstrate the need for reevaluation of current national recommendations for early diagnosis of breast cancer in premenopausal women.

#### Economic Issues

Regarding cost, only 4.4% of the 392 women studied by Zapka, et al. (1996) ages 50-74 paid out-of-pocket for their mammograms. According to these investigators, many low-income women utilize free clinic services; these women, however, have a less reliable history of last mammogram. The authors contribute this condition to the transient life-style many of these women live. They also point out that low-income African-American and Hispanic women's care seeking patterns are different from those with more income.

Kottke, et al. (1995) reported that more than half (59%) of the 1,019 Minnesota women they studied had a mammogram within the previous year. The majority were married, had greater than a high school education, were employed, and had a mean annual income of \$33,700. In contrast, Etzi, Lane, and Grimson (1994) studied 237 low-income women's reports from memory of last mammogram to be 40% accurate to the month and year and 97% accurate for the year for those receiving their annual mammography from a mammography van. Etzi et al. commented that women tended to "forward telescope" the actual date of their mammogram, which means these women, actually had a mammogram more recently than reported. In a study by Skaer, et al. (1996) of 219 Hispanic migrant women over the age of 40 the majority had an annual income of less than \$15,000 and almost 40% of these women had never heard of a mammogram much less had one recommended by a health care professional.

Horton, Cruess, and Romans (1996) studied the adherence rates of ACS guidelines among a proportional sample of African-American and Caucasian women (n=1,071). They reported that the "typical" woman who was not following the ACS mammography guidelines was older than 65, had an annual income of less than \$25,000, had not graduated high school, and lived in a rural area. According to Horton, et al., more women who receive Medicare or Medicaid do not follow the recommended guidelines. Cost may be the primary barrier for these women.

Conversely, women with adequate resources are more likely to adhere to ACS guidelines. In a study by Maxwell, Bastani, and Bradford (1996) 35% of the

626 women in their study had two mammograms within a two-year period. The demographics of the participants are skewed toward women with advantages that allow them to obtain this screening, such as having health insurance, higher levels of education and income. The women expressed little concern about the cost of a mammogram. These results are supported by another study from Urban, Anderson, and Peacock (1994) who found that women who are more highly educated, who do not smoke, who had higher incomes and had less out-of-pocket expense for mammograms were more likely to follow the ACS guidelines. They speculated that the lack of a regular health care examination might predict a failure to follow mammogram guidelines. Frazier, et al. (1996) found that 88% of women who had a CBE within the past year also had a recent mammogram.

Fazier and colleagues (1996) reported on women they studied who have low-income and had not undergone a mammography, because they felt mammograms were unnecessary, that their physicians did not recommend one, or that the procedure was too expensive or difficult. The African-American and Caucasian women in this study who had mammograms were typically high school graduates, with an annual family income of more than \$20,000, who had seen an obstetrician/gynecologist on a routine basis, and were living in the West. Prominent predictors contributing to inducing Caucasian and Hispanic women to seek mammograms were being married, having a family annual income greater than \$35,000, seeing a doctor annually, and living in the Northeast.

Self-reported income appears to be associated with mammography rates.

Wyn, et al. (1996) found that 49% of the women they studied who had an annual income of less than \$25,000 per year would seek out mammogram screening verses 67% with more income. Moreover, uninsured women are three times more likely than insured ones to forego an annual mammogram. Education level is also a determinant of mammography usage. Wyn and colleagues found women with less than a high school education utilized mammography services less often than women with a college education (43% high school as compared to 75% college).

A study of low-income and low educated women who have access to the health care system and have regular examinations was not necessarily a predictor for following recommended ACS mammography protocols (Danigelis, et al. 1995). The majority of the women in this study of 281 participants were uninformed about mammograms and their physicians did not recommend mammographic screening (Danigelis, et al.).

Medicare pays 80% of the approved amount for a mammogram and the woman is responsible for the remaining 20% without supplemental insurance (Medicare, 1999). In 1993, the out-of-pocket expense for a woman on Medicare was \$58 (Kiefe, McKay, Halevy, and Brody, 1994). This amount of money constituted a barrier for many women (mostly African-American) on Medicare. In the study by Kiefe and researchers, mammogram services were offered for free of charge, which resulted in an increase in adherence significantly.

## Influence of the Health Care Professional

### Breast Self Examination

Nurses and other medical professionals influence a woman's decision to practice breast self-exam. In a study by Bhakta (1995) 39% of a sample (n=48) of Asian women did not know about BSE. Bhakta reported that women who were taught by a general practitioner how to carry out BSE were more likely to continue. Burnett, Steakley, and Tefft (1995), reported that women who are taught BSE by a health care professional, and state that they value this education as helpful, will more likely continue to incorporate this health practice into their lives. Sortet and Banks (1997) remind nurses that providing culturally sensitive teaching combined with an assessment of the patient's attitude about touching herself is critical to teaching BSE. These investigators caution that the goal of providing culturally sensitive information, instead of trying to not change a culture may improve health care practices.

In a sample of 339 women, who were primarily African-American, and were residing in the Washington D. C. area, Burnett, et al. (1995) also demonstrated a positive correlation between trust in a health care worker and an increase in the adherence of breast self-examination. Conversely, the influence of significant others increase intention to have mammography. Duke and co-workers (1994) surveyed African-American low-income women who acknowledged monthly BSE and claimed that their primary source of information came from their doctor. Health care



providers taking the time to teach proper technique resulted in the sample's increased adherence with monthly BSE from 52.6 to 84.8% (Duke, et al., 1994). In a study of Caucasian, middle income, prevention-oriented women, the augmentation of a BSE class along with friendly reminders and physician instruction significantly increased adherence to standards, from 59%–78% (Strickland, et al., 1997).

The results of a study by Budden (1995) suggest that the media provides the initial source of information for BSE, but that women will consult with their health care professionals for further information. Confidence in the performance of BSE will increase the likelihood a woman will continue to practice BSE (Sortet & Banks, 1997). Confidence can be enhanced by employment of a proper teaching technique by a caring health care professional. These researchers further postulate that women of the Appalachian culture may be suspicious of health care professionals, rely on folk remedies, and may place lower value on the health benefits of BSE. In contrast, Friedman, Nelson, Webb, Hoffman, and Baer (1994) who studied 427, primarily middle-income, college educated Caucasian women (87%) found that early detection of breast cancer motivates them to perform BSE along with the recommendations from doctors or nurses.

The influence of another person reminding women to perform monthly BSE is variable. In a 1996 study by Savage and Clarke, Australian women were studied and responded that only 15% of them would be influenced by another person to conduct BSE. However, of these women, 39% said they would be strongly influenced by their doctor.

### Annual Clinical Breast Examination

Wyn et al. (1996) found that women who did not have a regular health care provider were twice as likely not to have an annual CBE as women with a regular health care provider. Kottke, et al. (1995) reported that 90% of the women they studied would visit their health care providers to have a CBE if reminded to have the annual exam by the physician or office staff. Seeking an annual examination with a healthcare provider can be directly related to annual family income. Family incomes of greater than \$35,000 resulted in regular annual visits to health care providers, which in turn increased adherence to CBE (Frazier, et al., 1996).

### Mammography

Many women will seek out mammography services on their own without a health care professional's recommendation, if they value this screening. Horton, et al. (1996) studied 1,071 women over the age of 40 and found that even though 30% of them had a mammogram without physician recommendation, 87% would have preferred that their physician recommend this screening and remind them regarding the timing of annual examinations. Kottke, et al. (1995) supports this data, reporting that more than 91% of women in their study would have had a mammogram if a physician had ordered one, however, only 45% of them wished to be contacted at home to be a reminded of screening (Kottke, et al.)

Women over 65 years who have a regular physical examination by a health care professional were more likely to have a mammogram (Mayer-Oakes, et al.,

1996). The women studied also practiced other illness prevention strategies, such as having a regular Pap screening, wearing seat belts, receiving annual influenza inoculation, and participating in regular exercise. Without the influence of a professional relationship between clients and a regular health care professional, women are three times more likely to go without a mammogram (Wyn, et al.). These investigators also found that women did not have this preventive screening because their health care provider did not suggest it. In contrast, a study by Duke et al. (1994) found that low-income African-American women with chronic illness reported that the media was their primary source of information followed by their doctor (1994). Further, they determined that cost and accessibility were two of the barriers women reported as pivotal to not having a mammogram along with the fact that the health care provider did not recommend regular screening; the latter was viewed as the major barrier.

Burns, et al. (1996) studied the differences in mammography usage between African-American and Caucasian women in relation to the number of primary care visits they had in a year. Participants related that as the number of visits increased through the year so did the likelihood of a mammogram. However, disparity among the races is apparent with African-American women less likely to receive a mammogram. The authors concluded their study by stating "primary care visits are less likely to 'boost' mammography use for African-American women than for Caucasian women" (p. 181). Frazier, et al. (1996) supports this conclusion, stating

that African-American women are less likely to have a mammogram recommended to them by their physician.

One hundred-seventy women in Australia reported that only a small number of them (26%) would be influenced by another person to have a mammogram performed (Savage & Clarke, 1996). However, of the women who would be influenced by another person, 41% said they would be influenced by their doctor. Most of the Asian women in a study by Choudhry, et al. (1998) stated that they would heed a doctor's advice to practice good breast health—consisting of BSE, CBE, and mammogram.

The discussion of mammogram utilization among patients and physicians or other health care professionals appears equally distributed among racial groups. Conlisk, Herrick, and Passaro (1999) found more than three-fourths of women are counseled about mammograms. The specialty of the health care provider can influence a woman's decision to have a mammogram. Lane et al. found that women under the care of a gynecologist were more likely to perform within the ACS guidelines for mammogram (1996).

### Health Care Providers Teaching

Before establishing what providers can do to enhance mammography use, the status of current teaching methods of BSE should be analyzed. Moody, Smith, and Glenn (1999) studied Tennessee nurse practitioner practice patterns. Moody and other members of this nurse researcher team found that a majority of the clients that

were seen by NPs were young, Caucasian, non-Hispanic women. The patient encounters recorded consisted of Pap smears, and other health screenings, however, education and counseling of their clients did not include measures for promoting good breast health. Examples of education provided by the NPs consisted of nutrition, exercise, growth and development, smoking cessation, weight reduction, and family planning. Breast health information and education must be provided before health care professionals can expect women to comply with the ACS guidelines.

Morrison (1996) studied the supposition that breast health screenings may produce anxiety for some women. Morrison speculated that women may view detection of breast cancer as a prelude to disfiguring surgery. Nurses must inform patients that following ACS guidelines and detecting cancer early result in preventing potentially disfiguring and more invasive surgery. Eley, et al. (1994) studied other differences among African-American and Caucasian women. They reported that African-American women have a poorer prognosis when diagnosed with breast cancer. The researchers highly encouraged health professionals to target these vulnerable women and inform them of the benefits of practicing BSE, obtaining a CBE, and mammography.

#### Increasing Adherence with BSE

Nurses are in an optimal position to promote and increase adherence to BSE. Regardless of practice setting (primary care, home-care, or acute-care), nurses

should include an assessment of adherence with monthly BSE. Those women who are deficit in BSE technique should be taught the components to optimal breast health (BSE, CBE, and mammogram) along with other health promotion information such as weight control, smoking cessation, and hormone replacement therapy, (Sternberger, 1994). Burnett, Steakley, and Tefft (1995) state that women who consistently perform monthly BSE will continue to practice this health measure in the future.

Before patient communication begins, however, nurses must consider their own feelings about teaching BSE. Han, Bauman, and Cimprich (1996) studied the factors that influence nurses to teach BSE. This population of female nurses reported that 94% of them conducted regular BSE on themselves. Nurses who taught BSE to their patients reported higher knowledge of breast cancer, greater professional confidence, and competence in BSE skill. On a personal note, Han and colleagues found that those nurses who regarded educating women about BSE as high had been impacted directly by breast cancer in their lives, i.e. they themselves, a family member, or a friend had experienced breast cancer.

Facione, Dodd, Holzemer, and Meleis (1997) reporting on a study of 352 African-American women found that one in three would delay seeking care if a breast cancer symptom was noted. These researchers recommended:

History taking should be expanded to assess women's ideas about the consequences of delaying evaluation of self-discovered breast symptoms, their sense of vulnerability to breast cancer, the constraints on cancer early

detection they may be feeling related to role obligations, their economic or strategic limitations to accessing services, the pressures they might feel to hide a breast cancer symptom, or their own tendency to interpret the breast symptom as not threatening (p. 226).

The most important step takes place before the teaching. Assessment of the woman's knowledge, psychomotor skills, attitudes, and readiness to learn must be thoroughly conducted (Sternberger, 1994). Determining if any barriers to performing BSE exist for the patient, such as lack of knowledge regarding the menstrual cycle, negative cultural attitudes about touching one-self, or physical or disabling barriers (i.e. arthritis) can influence readiness to learn. Assessment of a woman's anxiety level regarding monthly BSE and breast cancer must be determined. Barron, Houfek, and Foxall (1997) concluded in their study on breast health that anxiety could be a motivator or a barrier for women. They found that women require propitious, yet accurate, information about breast cancer in general and specific measures to practice good breast health. However, women who have low motivation due to a low anxiety level about breast cancer need information about their own breast cancer risk (Barron, et al.). The woman's level of fear about breast cancer must also be determined. McCaul, Reid, Rathage, and Martinson (1996) acknowledged that women who have a fear of breast cancer (usually due to a family history) would be prompt to conduct BSE as long as the fear is channeled into preventative measures and not avoidance patterns.

Review of the ACS guidelines with a patient may increase a woman's understanding of national standards for her age and providing her with this pamphlet may assist in reinforcing the activity. Women may report difficulty in remembering the timing of BSE. Helpful techniques are: reminder stickers for calendars, BSE technique guides taped to the inside of a medicine cabinets, placing a dot on her oral contraceptive pack (Sternberger, 1994). Leslie (1995) affirms that pamphlets women receive are often written on a reading level beyond the comprehension of many women and nurse practitioners could create leaflets at appropriate reading levels targeting a less educated segment of the population. Using terminology that women can relate to cognitively and culturally can help them understand the BSE technique (Morrison, 1996).

Return demonstrations of BSE in the office will assist health providers to determine proficiency and provide feedback with the technique (Sternberger, 1994). Morrison (1996) points out that mastering the BSE technique may require several instructional sessions. Motivation can be assessed at this time. Including a family member or loved one in the exam and teaching them the technique along with the client can increase adherence of monthly examinations (Lierman, Powell-Cope, Benoliel, Georgiadou, & Young, 1994). According to Sternberger (1994) a follow-up phone call in one month can be conducted to answer any questions and provide further opportunity to encourage the incorporation of this health promotion behavior into lifestyle.



### Increasing Adherence with Clinical Breast Examination

Increasing the adherence to have a clinical breast examination (CBE) requires community effort including media coverage. Visiting health care providers becomes the first step in completing this screening. In a longitudinal study by Lane, Caplan, and Grimson (1996), women completing a CBE according to ACS guidelines increased from 52% to 56% throughout a two-year breast cancer awareness campaign. Additional benefits noted by Lane and co-workers determined that having a CBE is the highest predictor of having a mammogram; in fact the benefit of having a CBE increased the likelihood of having a mammogram by 8 times (Lane, et al.). Mickey et al. (1995) emphasized that the only common denominator among women who do not receive a yearly CBE was for women to not have annual mammography (1995). Mickey et al. suggest that health care providers inquire about previous CBE and offer this preventive service regardless of the reason for the visit.

### Increasing Adherence with Mammography

The National Cancer Institute (1999) noted that with every ethnic group, the rate of mammography usage decreases with age. The benefits of adding annual mammography to the screening for breast cancer results in a 3% decline in mortality per year (Chevarley & White, 1997). A mammography examination tends to be more challenging in terms of client adherence due to the cost of the exam, lack of

knowledge about the exam, and the logistics of the procedure. Talking to the patient about perceived risks and the benefits gained from regular mammogram screening may increase adherence to the ACS guidelines. Crane and researchers (1996) determined in their population of ethnically diverse women over the age of 50 who received care at a local health department that the lack of provider-patient communication produced a privation of breast health screenings. Danigelis et al. (1995) state that recommending mammography does not translate into automatic adherence. Since most of the women were unable to describe the process or benefits of having a mammogram, they were less likely to have one. The researchers advocate that in order to increase adherence, health care providers must explain the benefit-risk ratio of the procedure to patients (Danigelis, et al.).

Creative medical care delivery may be an impetus to increasing adherence for underserved women. Mickey, et al. urge primary care providers to offer low-cost or free screening to women without health insurance since this barrier will create the most difficulty in regard to adherence (1995). Mickey and researchers inform practitioners that professional education programs can be a link to providing these innovative services.

Taylor, et al. (1999) found that after adjusting for age, race, insurance coverage and previous mammogram, that women were three times more likely to have a mammogram if they were sent a clinic reminder. With the augmentation of a clinic nurse to send or call clients and remind them of appointments, about half of the women completed a mammogram within the ACS guidelines (Taylor, et al.).

However, simply reminding the women may be fruitless, since a lack of transportation may hinder her adherence (Mickey, et al., 1995).

Taylor and co-workers (1999) recognized that an optimal time for teaching women about breast health is during their waiting time before being seen by a health care provider; and recommend the use of an educational video about breast health as a useful diversion. They concluded by stating that adherence can be greatly improved by incorporating teaching by both nurse and physician into education plan, providing materials that can be reviewed by patients during leisure time and sending appointment reminders for mammography.

Decreasing obstructive barriers for women will increase the likelihood of a mammography examination. Mishra, et al. (1998) provided the examination, transportation, child-care, and evening appointments for working-poor Hispanic women. As a result of these provisions there was a 25% increase in the number of women who had a mammogram. Kurtz, Kurtz, Given, and Given (1994) improved mammography screening adherence by offering a worksite service. The women in this study were primarily Caucasian and more highly educated women. Having their mammogram at work was convenient and increased adherence, therefore, women rated the importance of breast cancer screening highly because of the positive reinforcement from co-workers.

Measures to increase the usage of mammograms remain a part of Medicare's future. The fiscal Year 1999 plan for the Health Care Financing Administration (HCFA) was to provide 59% of beneficiaries who were over 65 years old with

mammograms within a 2-year period. HCFA aimed for 60% of women to have this screening in 2000, which parallels the goals of the Healthy People 2000. It remains to be seen if these plans materialize.

### Framework of Study

The concept of marginalization is derived from critical and feminist theories. Marginalization, as defined by Hall, Stevens, and Meleis (1994) "is the process through which persons are peripheralized on the basis of their identities, associations, experiences, and environments" (p. 25). More specifically, a person may be marginalized by gender, race, political affiliations, culture, or economic status (Hall, et al., 1994).

In order to apply the concept of marginalization theory to the assessment of breast health knowledge among women who are peripheralized from the Euro-centric norm, the properties of marginalization must be assessed. These properties include: (a) intermediacy, (2) differentiation, (3) power, (4) secrecy, (5) reflectiveness, (6) voice, and (7) liminality (Hall, et al., 1994). "*Intermediacy* is defined as the tendency of human boundaries to act both as barriers and as connections" (Hall, et al., 1994, p. 25). This determines the "personal space" a woman has identified as her own domain. Intermediacy must be assessed in order for the nurse practitioner to conduct proper breast health screening. In addition, this assessment is necessary to understand how the woman feels about touching her own body. The next property is *differentiation*, defined by Hall, et al. as "the

establishment and maintenance of distinct identities” (1994, p. 26). Differentiation allows those in the center of a community to exert hierarchical power often by stigmatizing those who do not fit the “norm.” The health care professional often will prioritize and promote certain health teaching according to research based on Eurocentric samples, which may not fit the needs of those who are marginalized. *Power* is defined as “influence exerted by those at the center of a community over the periphery and vice versa” (Hall, et al., 1994, p. 27). A trusting relationship can be compromised by the perception of the authority a health care provider has over a marginalized woman. Also, those with the greatest power and influence in a community more easily obtain adequate health care coverage. *Secrecy*, another property, is defined as “confining information to establish interpersonal bonds, maintain trust, and avoid betrayal” (Hall, et al., 1994, p. 28). Access to resources, which include health education information, may be withheld if language, culture, and /or stigmatizing features raise emotions that cause providers discomfort. Encounters with these clients may be shortened. Those who are marginalized may likewise withhold certain personal information from the health care provider in order to avoid stigmatization. For example, women who are lesbian, are drug users, or who are in the sex trade, may decide to suppress this personal information in order to receive unbiased care. “*Reflectiveness* is defined as the fragmenting and conflicting psychic effects on marginalized persons of discrimination, privatization, isolation, [and sometimes] invisibility...and the interior work that is required to understand and compensate for these effects” (Hall, et al., 1994, p. 30).

Marginalized women reflect on experiences that are distinct from those in the center and may also interpret life experiences differently. This piece of information is imperative when teaching marginalized women about the tenants of optimal breast health. For example, African-American women have a diminished incidence of breast cancer, but those women who are diagnosed with cancer are more likely to be in more advanced stages and more likely to die from the disease. The property of *voice* is "the languages and forms of expression characterizing marginalized subcultures" (Hall, et al., 1994, p. 31). The property of developing one's own language can also be a barrier to educating women about breast health since the marginalized women may misinterpret words used to describe teaching.

Alternatively, marginalized woman may feel misunderstood if her forms of expression and story differ from the "expected" one. The final property, *liminality*, "is altered and intensified perceptions of time, worldview, and self-image that characterize and result from marginalizing experiences" (Hall, et al., 1994, p. 33). Liminality must be assessed in order to gauge the emphasis placed on illness prevention and the power a woman feels to change the course of disease by early detection. Liminal experiences may preoccupy marginalized women so that they miss out on essential health care and information.

What about the perceptions a marginalized woman has about health? Does her environment impact her health? The marginalized woman is vulnerable to the effects of an exposed or unprotected environment (Hall, et al., 1994). However, this vulnerability can be divided into negative (risk) or positive (resilience) implications.

The risk to illness in marginalized women may be comprised of the lack of knowledge groups of women may have about breast health or the increased risk of breast cancer due to genetic predisposition. Conversely, resilience is demonstrated when marginalized women attempt to protect themselves by supporting one another with the sharing of information about breast health. An example of this might be an incidence involving African-American women organizing breast screening through a church community.

Marginalized women often lack optimal medical care and are often denied necessary health education due to the monetary inability to access care. Nursing care, particularly nursing education, may be a luxury many American women are denied due to their lack of access to health care (Stevens, 1992). "Marginalized people are vulnerable to health risks resulting from discrimination, environmental dangers, unmet subsistence needs, severe illness, trauma, and restricted access to health care" (Hall, 1999, p. 88). The emphasis that the health care industry places on producing a profit will only exteriorize greater cohorts of marginalized society by providing illness prevention education to only those who can pay (Hall, 1999). In addition, many working Americans are not receiving health care benefits through their employers which usually affect those who have received the least amount of formal education (Robert Wood Johnson Foundation, 2000). Educating marginalized women on breast health is therefore one of the nursing professions greatest challenges.

Hall, et al. (1994) state, "by incorporating the concept of marginalization as basic to empirical and theoretical activities, nurses can build understanding about the complex linkages between vulnerability and health" (p. 24). Although the American Cancer Society distinguishes survival rates among races and income levels, marginalization theory suggests that the mortality of large cohorts of women may escape detection. Nurses are greatly challenged to emphasize breast health teaching to women who have limited access to societal, economic, and health resources. Studying how nurse practitioners approach this population within the context and definitions as provided in the theory will provide insights that may guide future practice.

#### Nominal Definitions

1. Marginalization – The process of persons being peripheralized from the Eurocentric norm on the basis of identities, associations, experiences, and environments (Hall, Stevens, & Meleis, 1994).
2. Nurse Practitioners –advanced practice nurses who are certified by appropriate national credentialing bodies and who qualify for a Certificate of Fitness with the state of Tennessee to prescribe medications according to physician protocol.



### Specific Aims and Research Questions

Breast health is defined as practicing monthly BSE, participating in an annual clinical breast examination, and obtaining scheduled mammograms. Breast health is, in part, influenced by the promotion of relative importance placed on the endeavor by a nurse practitioner, other health care providers, and social networks. The purpose of this study is to determine the rank order importance nurse practitioners place on giving breast health information among marginalized women.

The questions proposed for study are:

1. Do nurse practitioners in health departments prioritize and promote breast health equally with those NPs who work in private practice?
2. Does a difference exist among the specialties of advanced practice nursing (women's health, adult health, and family nurse practitioner) on how breast health knowledge is assessed?
3. Does level of professional education preparation impact how a NP will prioritize assessment of breast health knowledge among marginalized woman?

### Summary

The literature review clearly describes the complexity of the nonadherence of practicing appropriate breast health screenings according to the American Cancer

Society and documents the compounding factors of marginalization many women have to overcome in order to receive adequate health care that others are privy to receive. Appropriate teaching by nurse practitioners provides an opportunity for education that marginalized women may otherwise not receive. Nurse practitioners should prioritize education regarding breast health relatively high especially for the subgroups of marginalized menopausal women. The research reviewed demonstrates that some of the barriers to receiving appropriate breast health assessments are with women who have less formal education, less money, and those not proficient with the English language.

### CHAPTER III

### METHODOLOGY

#### Research Design

A nonexperimental study was done to determine how nurse practitioners (NPs) rank ordered the assessment of and the health promotion of appropriate breast health knowledge among marginalized women. The convenience sample consisted of nurse practitioners who worked in direct patient care located at seven local health departments and private practices. The sample was selected from a listing of nurse practitioners from the east Tennessee region who held a certificate of fitness with the state nursing board that allowed them to prescribe medications. The list of NPs that currently hold a certificate of fitness was available to the public for a fee through the Tennessee State Board of Health. In addition to the state listing, health department NPs received surveys through their employer once approval by the health department was given. To be eligible for the study, NPs needed to be currently employed (full-time or part-time), with a specialty area of family health, adult health, or women's health. Consent forms were distributed with the survey and the return of the questionnaire was considered as implied consent (Appendix A and B).

Descriptive statistics were used to describe the sample, whereas, inferential statistics were used to analyze ordinal data. A comparison of the cases vs. controls of NPs (those working in health departments and those working in private practices)

determined how priority of breast health education and assessment ranked with other essential health teaching.

In the questionnaire, five vignettes depicted marginalized women and NPs rank ordered the assessment of health practices and knowledge about breast health. The NPs were questioned about how they would rank order the health promotion data following each vignette. The health promotion data were consistent with each vignette and contained teaching about immunizations, nutritional concerns, importance of regular exercise, smoking cessation, weight reduction, heart disease prevention, osteoporosis prevention, mental health screenings, annual pap smears, monthly breast self examination, annual clinical breast examination, and mammography. These education topics were chosen, in part, based on the study by Moody, Smith, and Glenn (1999) that found nurse practitioners teach patients about nutrition, exercise, growth and development, smoking, cessation, weight reduction, and family planning. In the survey, the nurse practitioners were told there is no evidence of disease and were asked to rank order general health education. The rank ordering ranged from one to twelve. The value of one corresponded with what the nurse practitioner would promote first in the teaching and twelve corresponded with what the nurse practitioner would value least in teaching at this encounter.

The priority of health promotion assessment begins with the first encounter with the patient. Quite often, the priority of health promotion teaching may be decided according to aggregate categories, such as: age, gender, race, socioeconomic status, chronic illness and sequelae of illness. Once general

information is gathered about a patient, then nurses continue to assess and tailor health promotion teaching to individual needs. In each vignette, a specific marginalized type of women is described and the NPs will decide how to proceed with teaching according to the description given. All of the vignettes describe a perimenopausal or postmenopausal woman who are informed of the free health screening by flyers posted in the community.

### Vignette One

**A 50-year-old postmenopausal African-American woman comes to the office with two of her grandchildren over whom she possesses custody. She heard about the health screenings from a neighbor who saw the flyers. She reports that the last time she saw a health care provider (HCP) was five years ago when she broke her foot by falling through the porch floor of the tattered house she is renting. She says that she does not receive any health care benefits from the state. The woman is clean, but her clothes are out of date and do not match. You can offer her any resources today at no charge to her or your clinic.**

Being an African-American with apparently few financial resources may marginalize the woman described. However, she is also responsible for the well-being of young children, which may strain her financial resources further due to the cost of raising the children.

### Vignette Two

**A Caucasian woman who lives on the streets enters the clinic and sits down in the waiting room. She heard about the free services from people on the street. She cannot recall her last examination by a HCP. She states she is reluctant to give any information about nearest relatives and appears scared. She appears to be in her late forties. She has an unkempt appearance.**

The description of this woman may be characteristic of marginalization due to low socioeconomic status, prior experiences, and environment.

### Vignette Three

**A 45-year-old HIV positive, Caucasian woman comes to the clinic through the urging of her Infectious Diseases doctor. She is on public assistance for the disease, but continues to work outside the home at minimum wage. She has very limited personal resources. Her children are grown and she lives alone. The last health maintenance complete physical was before she was diagnosed with the disease seven years ago. She can't recall her last eye or dental examination.**

The presence of a communicable disease that has been stigmatized by society as the "gay" or "drug-user's" disease can be crippling regardless of the mode of transmission. Not only is she marginalized by the disease, the lack of financial resources also place her in the periphery.

### Vignette Four

**Two lesbian women come to the clinic after hearing about the free care from a local "Lesbian Rights" meeting. These women live together and work at a local restaurant and do not have much money. They go to the HCP when they are sick and pay cash for the care received. One of the women is 48 and the other is 49 years old. They report understanding the importance of having health screenings, but have not completed physicals for more than ten years due to financial burdens.**

The two women who are described in this vignette fit the definition of marginalization due to their identities as lesbian and their lack of money.

### Vignette Five

**A 55-year-old migrant Latina woman comes to the clinic after seeing the flyer on a bulletin in her ethnic neighborhood. She uses part of her grocery money to catch the bus to come to the clinic. She has only been in the U.S. for one year and speaks broken English. You have a translator in the office. She reports that she went to the emergency room about a year ago for pneumonia and has had a full recovery. Otherwise, she does not go to a HCP for routine care.**

This woman can be considered marginalized because of her culture. She is peripheralized from the Eurocentric American culture not only because of her ethnicity, but also because she is unable to speak English well. She, too, lacks the financial resources needed to have regular health maintenance check-ups that are routine for Americans with adequate health care resources.

### Procedures

The researcher obtained permission for the study from the Departmental Review Committee at University of Tennessee, College of Nursing and the Human Subjects Departmental Review at the university level. Additional forms were filed in order to distribute surveys to the health departments who gave permission after University Departmental Review Committee approval was obtained (Appendix C).

Surveys were sent to the addresses on file with the state and to the individual health departments that gave permission for distribution. Self-addressed stamped envelopes were enclosed with every survey. As the surveys were returned to the researcher, all data were coded for input. SPSS 9.0 for Windows software from the University of Tennessee, College of Nursing was used. Using the SPSS program,

data were tested using repeated measures and analysis of variance. Any differences were further explored with appropriate posthoc analysis.

### Subjects

The State of Tennessee reported that 438 nurse practitioners have a certificate of fitness as of 1999 on file with the state in 27 Eastern counties. The 27 health departments received letters asking permission to send the surveys to their department. Seven counties (Knox, McMinn, Hamilton, Sevier, Hawkins, Greene, and Loudon) allowed the surveys to be distributed in their clinics to the nurse practitioners (Appendix C). The total number of surveys sent to addresses received on file from the state and to health departments equaled 507. Distributing the surveys among the health departments meant that the NPs working in this setting received the survey twice, once with the address on file with the state and the second survey received at the clinic where they were employed. This duplication of effort was used to ensure that those NPs working in public health would be well represented.

Of the 438 nurse practitioners that should have received surveys, 229 were completed and returned, and ten were returned due to change of address (53.5% return rate). Forty-two of the 229 surveys were not used in the data analysis for several reasons: (a) four subjects are no longer employed as a NP, (b) one returned survey without completing demographic piece, (c) one is employed as a clinical nurse specialist, (d) two are employed as staff nurses, (e) four are retired, (f) six



placed check marks instead of numbering the responses, (g) fourteen were employed as pediatric nurse practitioners, (h) six work as mental health clinical specialists, (i) four reported other specialties which did not meet the selection criteria, and (j) ten were returned to the researcher after the data were calculated. The final tally of responses from 167 nurse practitioners was used as data. This represents 38% of nurse practitioners who currently are in practice in the east Tennessee region.

The survey contained a cover letter that explained that returning the completed survey to the researcher was considered implied consent. Filling out the survey was voluntary and no payment was given to the subjects. The researcher received one electronic message from one respondent inquiring about how her name and address was given to the researcher. Four of the nurse practitioners wrote comments on the survey stating that filling out the survey was difficult for them since there were no objective data regarding the patient status. Ten of the nurse practitioners stated that they could not rank order promotion of smoking cessation since the vignette did not describe the woman as a smoker. However, in the directions regarding how to respond, emphasis was placed by underlining the fact that all the women in the vignettes needed the health education from the twelve selections.

#### Characteristics of the Sample

The total number of nurse practitioners who met the selection criteria (n = 167), were all currently working in the east Tennessee region and had a certificate

of fitness on file with the state. The mean age of the nurse practitioners was 41.06 years ( $SD = 8.55$ ). However, only 70 of the 167 (41.9%) respondents provided their age. The majority (80.2%) were married or partnered.

The level of education among the nurse practitioners was reported to be at the master's level (95.8%), however, there were also some diploma graduates (1.8%), some bachelor's (0.6%), and several with doctoral (1.8%) degrees. The large number of NPs who are masters prepared or beyond is directly related to the fact that in Tennessee there is a state mandate that all nurse practitioners complete graduate school in order to practice in the field. Both diploma and bachelors prepared NPs have been grandfathered in.

The NPs who reported their practice site as private was 118 (70.7%), public practice site 40 (24%), 2 respondents did not answer this question. Although the number of NPs who are practicing in public sites did not reach the previously determined goal of 50, the 40 NPs who did respond were used in the data calculation. The specialty areas of practice were reported as family nurse practitioner 118 (70.7%), adult health nurse practitioner 16 (9.6%), and women's health nurse practitioner 33 (19.8%). This unbalanced response rate of the nurse practitioner specialties may be representative of the nurse practitioner population.

## CHAPTER IV

### RESULTS

The results of the testing of each hypothesis are presented in this chapter. Each research question is stated and then followed by the statistical testing and results. Tables and figures are presented to further illustrate the results of the study.

#### Testing of the Hypothesis

This was a nonexperimental study design. Because responses were rank-ordered responses, the data were treated as interval level. The responses by the nurse practitioners were normally distributed in regards to breast health promotion; therefore parametric statistics were used. Using SPSS 9.0 for Windows analysis of the data was completed. An alpha level of 0.05 was chosen for use with all statistical analyses. Each question was subdivided according to: (a) breast self-examination, (b) clinical breast examination, and (c) mammography. One important note, when viewing the figures and table, the lower number on the scale represents a higher level of importance placed by the nurse practitioners regarding the promotion of that facet of breast health.

#### Research Questions and Results

##### Question 1

**Do nurse practitioners in health departments prioritize and promote breast health equally as compared to NPs who work in private practice?**

The repeated measures analysis of variance (ANOVA) was used to test the responses of the NPs with breast self-examination, clinical breast examination, and mammography across vignettes. Each facet of the breast health promotion will be covered. In addition, the responses of all the nurse practitioners to the five vignettes are explored in order to determine the importance of breast health promotion in the aggregate.

### Breast Self Examination

The total number of public clinical setting nurses who answered all of the BSE questions was calculated. There was a slight decrease in the sample from the original for the analysis due to the fact that some teaching interventions were omitted by the nurse practitioners (public,  $n = 36$  and private,  $n = 113$ ). The nurse practitioners responses to the vignettes equally differed, therefore no significant interaction was noted among the vignettes [ $F(4,144) = 0.467, p = 0.760$ ]. For example, if the public practice nurse practitioners rated vignette 3 less important than the other vignettes, then the private practice nurse practitioners would tend to do so as well. Even though the ranking may not be equal, this particular vignette would be rated the highest among the other vignettes with all the other responses given. There was no statistical significance between-subject factors, which means the responses between the practice types in their overall responses, equally differed among the groups [ $F(1,147) = 7.407, p = 0.526$ ]. The within-subjects comparison among all nurse practitioners responses to the vignettes was significant [ $F(4,144) =$

15.153,  $p < 0.001$ ]. This means all the nurse practitioners rank ordered the vignettes significantly differently.

A comparison of the responses to the vignettes by all the nurse practitioners was done in order to determine if a difference existed between the vignettes. The vignette differences between the groups are noted in Figure 1. The mean score ranking from the smallest number to largest number, (most important to least important) which the nurse practitioners reported in regard to breast health among the vignettes is listed in Table 1. The span between the vignette which the nurse practitioners ranked the highest (most important) was vignette 4, describing the lesbian women and the lowest (least important) was vignette 3, describing the HIV positive woman. There is about a 1.5 point spread between these two vignettes. When viewing the responses of all the nurse practitioners to the vignettes a pairwise comparison was made in order to determine which vignettes were correlated with one another. Using the pairwise comparison (Table 2), Vignette 4, Lesbian women, was ranked more important by the nurse practitioners in promotion of breast self-examination than were vignettes 3 (HIV positive), 2 (Homeless), and 5 (Latina). In contrast, vignette 3 (HIV positive) indicated that breast health teaching was ranked less important in that group vs. in vignettes 1 (African-American), 4 (Lesbian), and 5 (Latina).

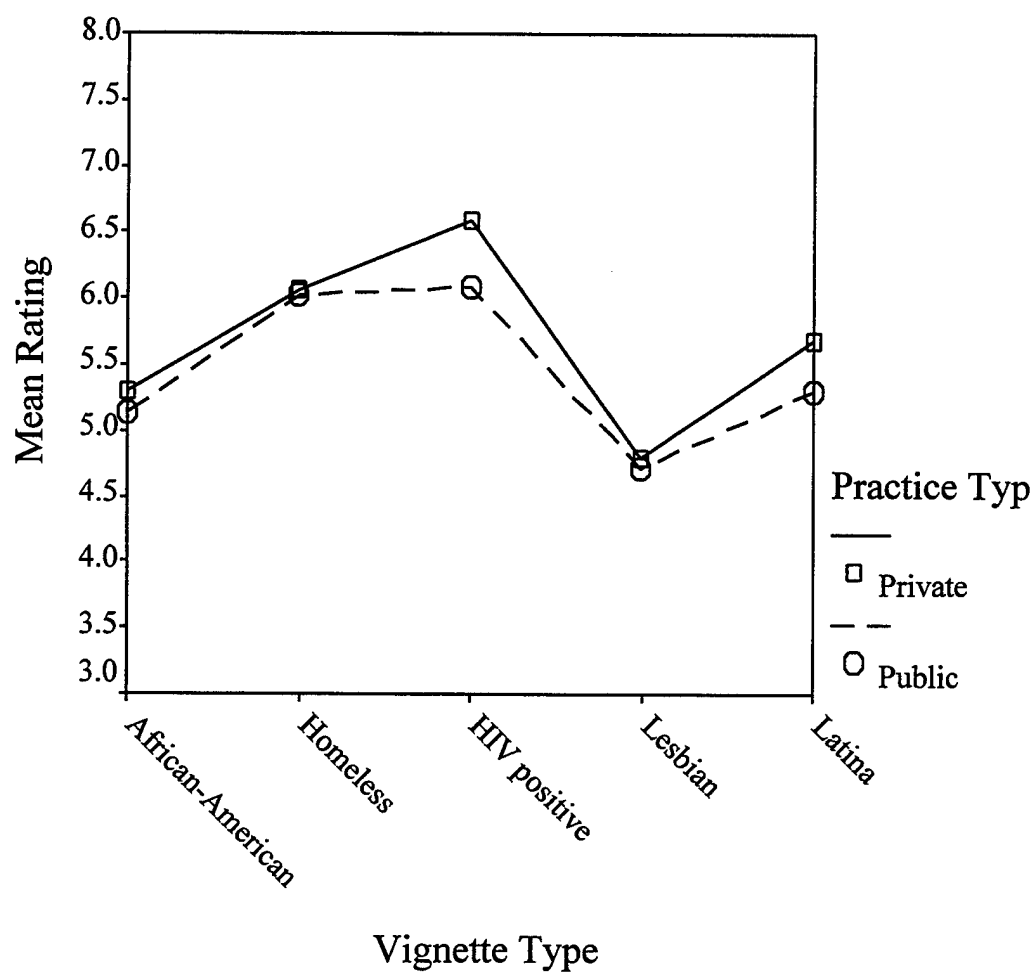


Figure 1. Vignette Differences for BSE Between Public and Private Nurse Practitioners\*

\*Note: A lower number means ranked higher in importance

Table 1. Mean Ranking of Importance for Breast Self Examination\*

Vignette	Mean	Std. Error
Lesbian	4.76	.244
African-American	5.22	.213
Latina	5.49	.250
Homeless	6.04	.220
HIV Positive	6.34	.231

\*Note: A lower number means ranked higher of importance

Table 2. Pairwise Comparison of Vignettes for Breast Self Examination

Measure: MEASURE\_1

Vignette Type	Vignette Type	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
African-American	Homeless	-.829*	.235	.006
	HIV positive	-1.118*	.235	<.001
	Lesbian	.461	.228	.448
	Latina	-.274	.232	1.000
Homeless	African-American	.829*	.235	.006
	HIV positive	-.289	.215	1.000
	Lesbian	1.290*	.237	<.001
	Latina	.556	.227	.155
HIV positive	African-American	1.118*	.235	<.001
	Homeless	.289	.215	1.000
	Lesbian	1.579*	.212	<.001
	Latina	.845*	.217	.002
Lesbian	African-American	-.461	.228	.448
	Homeless	-1.290*	.237	<.001
	HIV positive	-1.579*	.212	<.001
	Latina	-.734*	.211	.006
Latina	African-American	.274	.232	1.000
	Homeless	-.556	.227	.155
	HIV positive	-.845*	.217	.002
	Lesbian	.734*	.211	.006

Based on estimated marginal means

\* . The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.



### Clinical Breast Examination

Public setting nurses ( $n = 38$ ) and private setting nurses ( $n = 122$ ) were used to calculate the promotion of clinical breast examination. There is no significant interaction in regards to the promotion of clinical breast examination between the groups [ $F(4,155) = 0.817, p = 0.516$ ]. However, there is a statistical significance between-subject factor in the groups with the overall promotion of annual clinical breast examination [ $F(1,158) = 50.282, p = 0.034$ ]. The public practice nurse practitioners, therefore, rated the importance of clinical breast examination higher than the private practice NPs. When comparing within-subjects of all the nurse practitioners the responses to the five vignettes differed between the nurse practitioners and were statistically significant as well [ $F(4,155) = 22.293, p < 0.001$ ].

A comparison of the responses to the vignettes among all the nurse practitioners appears in Figure 2. The mean scores from the most important, vignette 4 (Lesbian), to the least important, vignette 3 (HIV positive) are presented in Table 3. Between the two vignettes there is a 1.6-point difference. The pairwise comparison (Table 4) determined that vignette 4 (lesbian) was significantly more important than vignette 2 (Homeless), 3 (HIV positive), and 5 (Latina). However, vignette 3 (HIV positive) was significantly rated the least important vignette to promote clinical breast examination in comparison with the other vignettes.

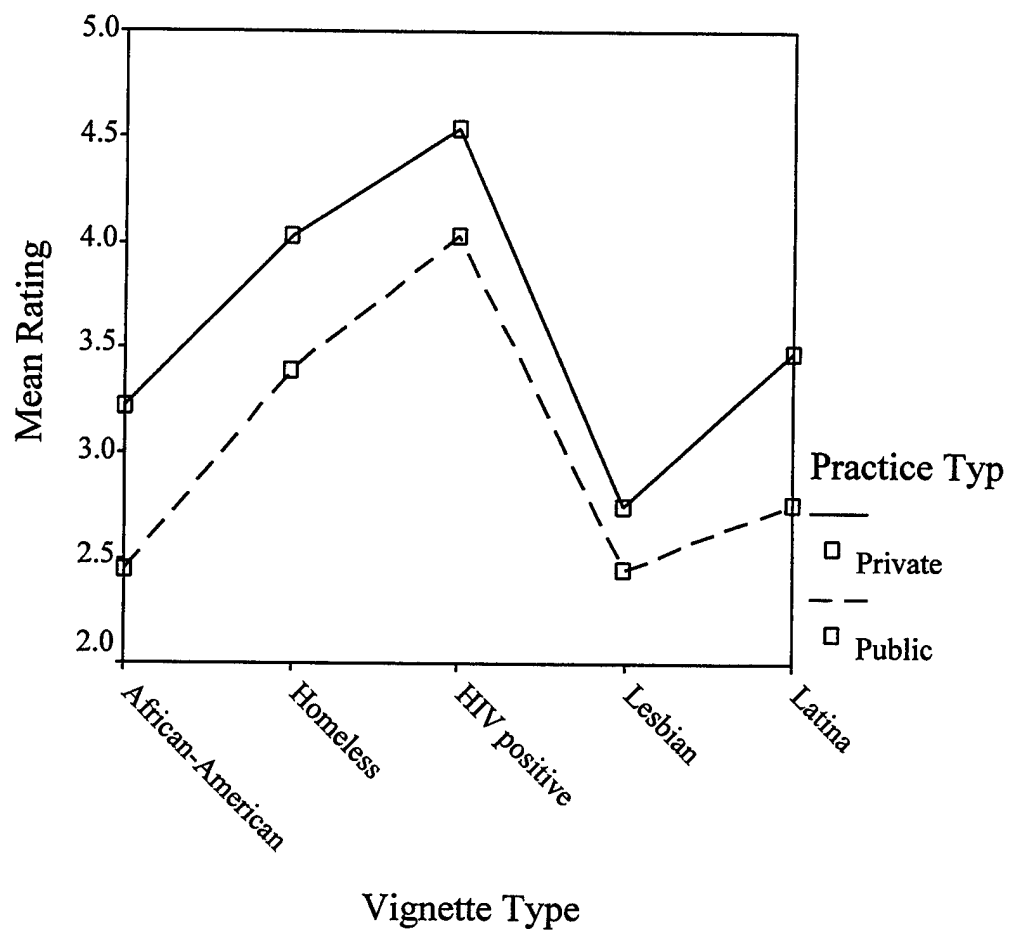


Figure 2. Vignette Differences for Clinical Breast Examination Between Public and Private Nurse Practitioners\*

\*Note: A lower number means ranked higher of importance

Table 3. Mean Ranking of Importance of Clinical Breast Examination\*

Vignette	Mean	Std. Error
Lesbian	2.60	.156
African-American	2.83	.182
Latina	3.12	.184
Homeless	3.71	.161
HIV Positive	4.28	.210

\*Note: A lower number means ranked higher of importance

Table 4. Pairwise Comparison of Vignettes for Clinical Breast Examination

Pairwise Comparisons				
Measure: MEASURE_1				
Vignette Type	Vignette Type	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
African-American	Homeless	-.879*	.191	<.001
	HIV positive	-1.449*	.230	<.001
	Lesbian	.234	.169	1.000
	Latina	-.285	.207	1.000
Homeless	African-American	.879*	.191	<.001
	HIV positive	-.570*	.174	.013
	Lesbian	1.113*	.147	<.001
	Latina	.594*	.149	.001
HIV positive	African-American	1.449*	.230	<.001
	Homeless	.570*	.174	.013
	Lesbian	1.683*	.195	<.001
	Latina	1.164*	.200	<.001
Lesbian	African-American	-.234	.169	1.000
	Homeless	-1.113*	.147	<.001
	HIV positive	-1.683*	.195	<.001
	Latina	-.519*	.150	.007
Latina	African-American	.285	.207	1.000
	Homeless	-.594*	.149	.001
	HIV positive	-1.164*	.200	<.001
	Lesbian	.519*	.150	.007

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

<sup>a</sup>. Adjustment for multiple comparisons: Bonferroni.

### Mammography

The number of nurse practitioners who answered all the questions regarding mammography promotion are as follows: public setting ( $n = 36$ ) and private setting ( $n = 114$ ). There was no significant interaction between the groups and the answers to the vignettes concerning mammography [ $F(4,145) = 0.536, p = 0.710$ ].

Mammography promotion to the marginalized women described in the vignettes was promoted the same among all groups. When comparing between-subject tests, whether private or public, there is no statistical significance in the difference between the responses [ $F(1,148) = 0.318, p = 0.907$ ]. This means the responses by the two groups of nurse practitioners were similar. The within-subjects comparison revealed a disparity in the response to the vignettes with all nurse practitioners in the promotion of mammography and was found significant [ $F(4,145) = 22.533, p < 0.001$ ].

The difference between the vignettes among all the nurse practitioners in the promotion of mammography screenings revealed a clear division among the vignettes. The plot diagram in Figure 3 demonstrates a division among the groups. The mean ranking score of the vignettes is shown in Table 5. Vignette 1 (African-American) is ranked over two points higher than vignettes 2 (Homeless) and 3 (HIV positive). With the pairwise comparison (Table 6), intervignette divisions emerged. Vignettes 1 (African-American), 4 (Lesbian), and 5 (Latina) are significantly more

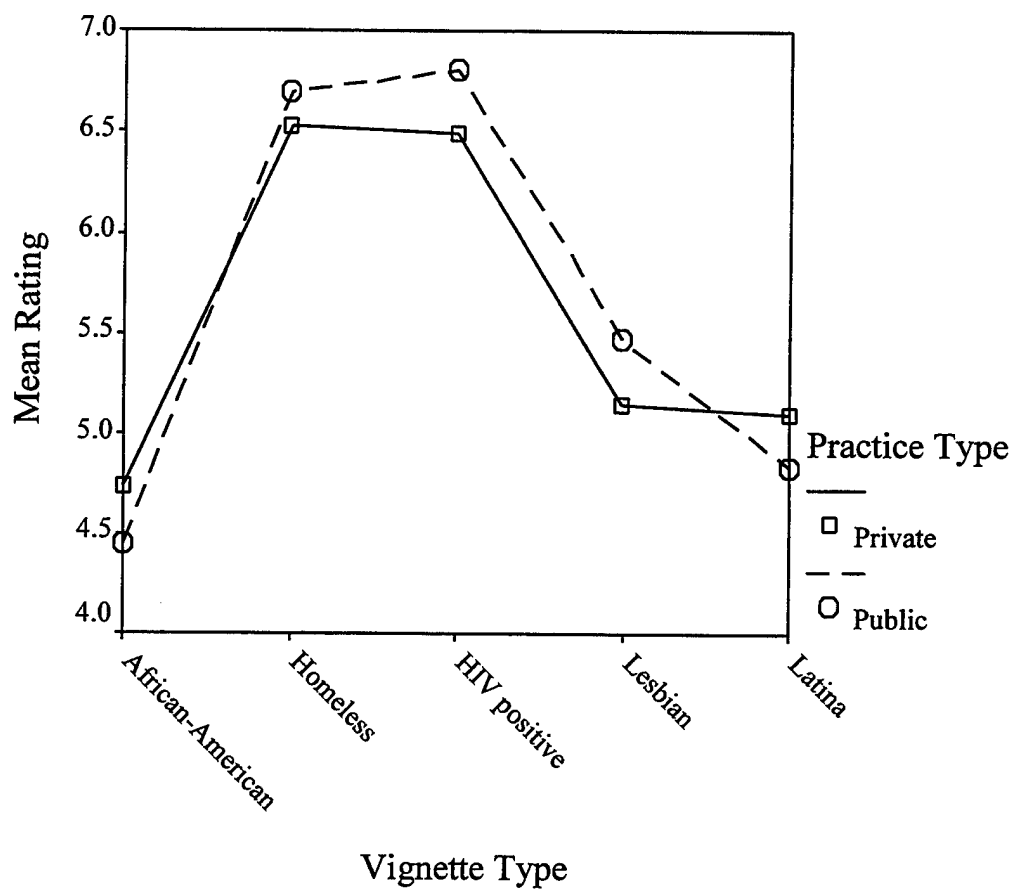


Figure 3. Vignette Differences for Mammogram Between Public and Private Nurse Practitioners\*

\*Note: A lower number means ranked higher

Table 5. Mean Ranking of Importance for Mammogram\*

Vignette	Mean	Std. Error
Latina	4.97	.249
African-American	4.59	.234
Lesbian	5.31	.308
Homeless	6.61	.262
HIV Positive	6.65	.262

\*Note: A lower number means ranked higher of importance

Table 6. Pairwise Comparison of Vignettes for Mammogram

Measure: MEASURE\_1

Vignette Type	Vignette Type	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
African-American	Homeless	-2.020*	.254	<.001
	HIV	-2.058*	.262	<.001
	Lesbian	-.720	.290	.140
	Latina	-.379	.215	.799
Homeless	African-American	2.020*	.254	<.001
	HIV	-3.801E-02	.233	1.000
	Lesbian	1.300*	.288	<.001
	Latina	1.641*	.249	<.001
HIV positive	African-American	2.058*	.262	<.001
	Homeless	3.801E-02	.233	1.000
	Lesbian	1.338*	.277	<.001
	Latina	1.679*	.255	<.001
Lesbian	African-American	.720	.290	.140
	Homeless	-1.300*	.288	<.001
	HIV	-1.338*	.277	<.001
	Latina	.341	.284	1.000
Latina	African-American	.379	.215	.799
	Homeless	-1.641*	.249	<.001
	HIV	-1.679*	.255	<.001
	Lesbian	-.341	.284	1.000

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

<sup>a</sup>. Adjustment for multiple comparisons: Bonferroni.



highly ranked in the promotion of mammography screenings than vignettes 2 (Homeless) and 3 (HIV Positive).

Question 2:

**Will there be a difference among the specialties of advanced practice setting (women's health, adult health, and family health nurse practitioner) on how breast health knowledge is assessed?**

The promotion of breast health had three components: (a) promotion of breast self examination, (b) clinical breast examination, and (c) mammography. The nurse practitioners who prioritized breast health promotion in each area were compared. The comparison of the vignettes among all the nurse practitioners was explored with question one.

With the breast self-examination component, the sample sizes were disproportionate: (a) family nurse practitioner ( $n = 106$ ), (b) adult health nurse practitioner ( $n = 15$ ), (c) women's health nurse practitioner ( $n = 30$ ). Due to the low response rate from the adult health nurse practitioners, the sample of adult health NPs was not used in the statistical calculations. This low response rate persisted throughout the breast health components of clinical breast examination and mammography and therefore was not computed. The responses from the family nurse practitioners and women's health nurse practitioners were used. As previously outlined, the responses will be separated according to breast self-examination, clinical examination, and mammography promotion.

### Breast Self Examination

When comparing the clinical specialties with the vignette responses, there were no significant interaction was found between the family health and women's health nurse practitioners [F (4,131) = 0.402, p = 0.807]. In addition, family nurse practitioners did not differ from women's health nurse practitioners in their responses to the vignettes when comparing between-subject analysis [F (1,134) = 10.452, p = 0.457]. The responses appear graphically in Figure 4.

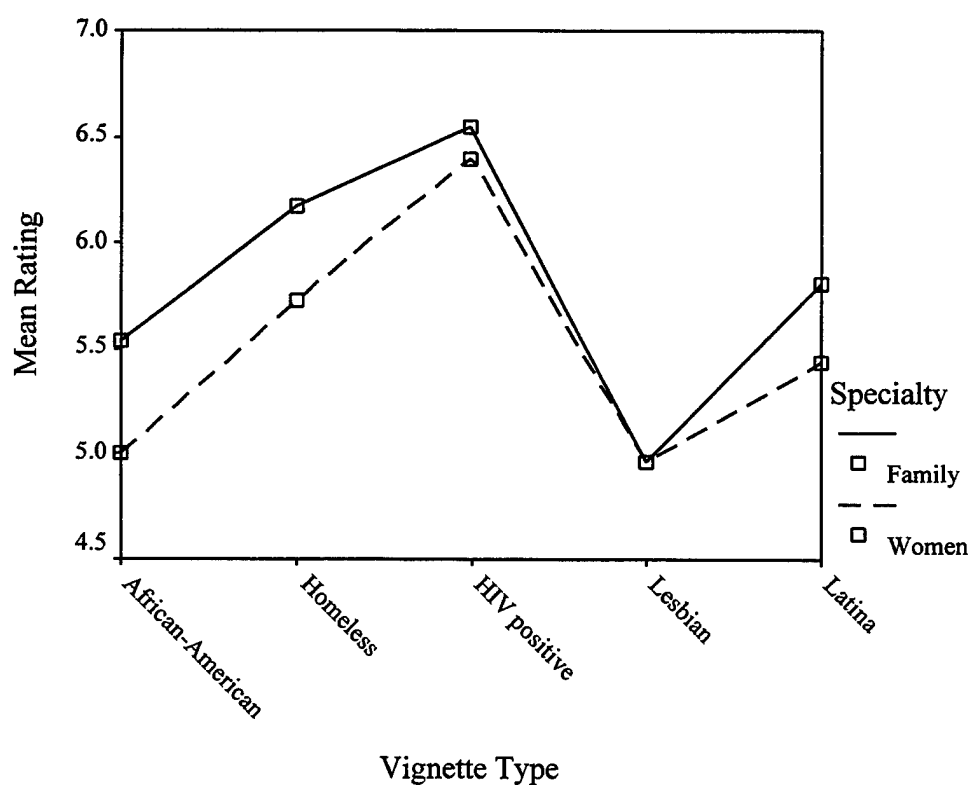


Figure 4. Comparison of Family and Women's Health Nurse Practitioners for BSE\*

\*Note: A lower number means ranked higher

### Clinical Examination

When comparing clinical breast examination promotion between family ( $n = 113$ ) and women's ( $n = 33$ ) health nurse practitioners, no significant difference were found [ $F(4,141) = 0.701, p = 0.592$ ]. The comparison of the nurse practitioners in this regard to annual CBE promotion showed a statistical significant difference [ $F(1,144) = 4.077, p = 0.045$ ]. Women's health nurse practitioners in this sample tend to promote CBE more than family nurse practitioners (Figure 5).

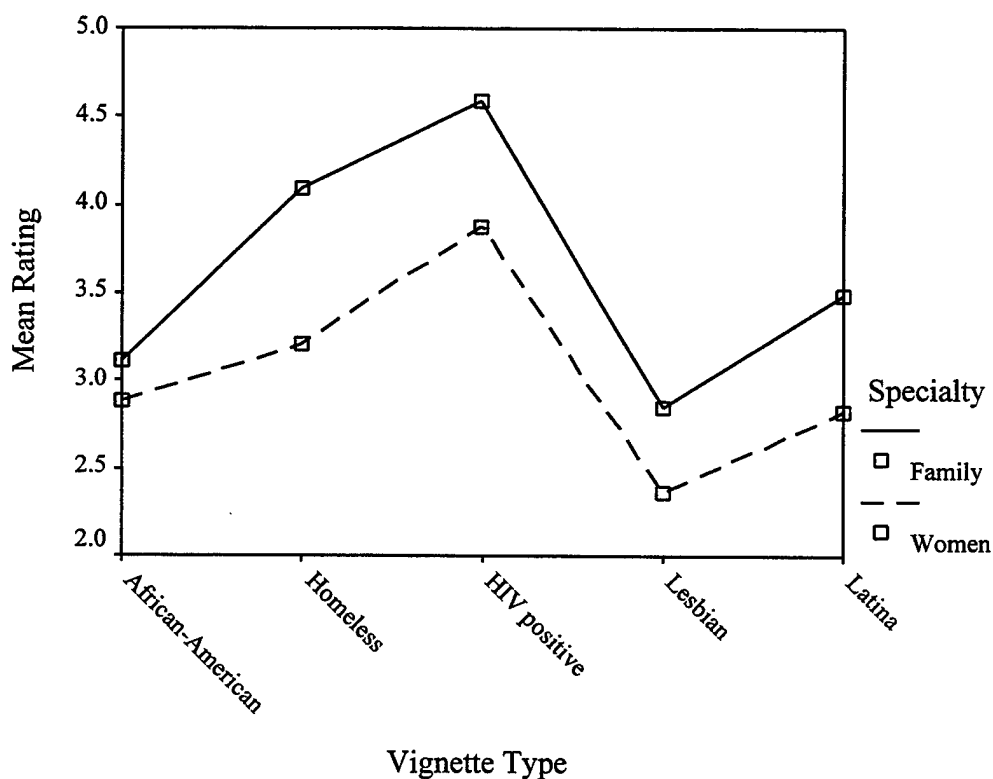


Figure 5. Comparison of Family and Women's Health Nurse Practitioners for CBE\*

\*Note: A lower number means ranked higher of importance

### Mammography

When comparing the responses from the two groups to the vignettes, their responses were without a significant interaction [ $F(4,131) = 2.1, p = 0.084$ ].

Overall, the women's health nurse practitioner tended to promote a mammography no differently than a family nurse practitioner [ $F(1,134) = 11.822, p = 0.479$ ].

Figure 6 shows the responses of the nurse practitioners.

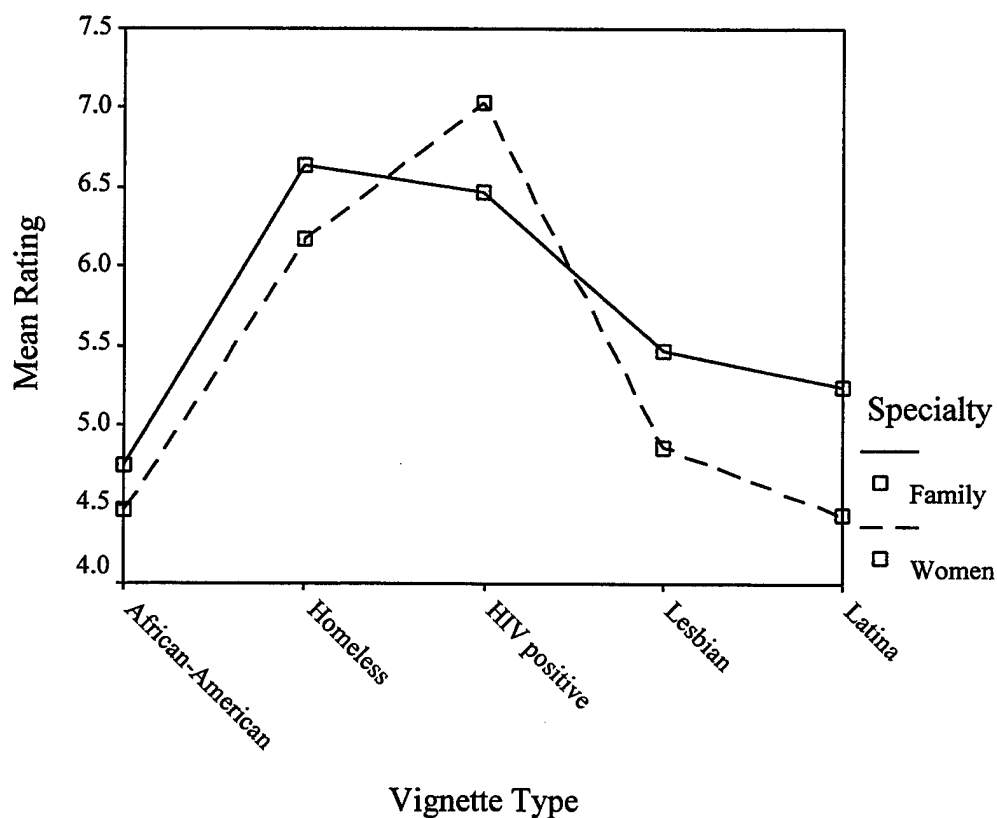


Figure 6. Comparison of Family and Women's Health Nurse Practitioners for Mammogram\*

\*Note: A lower number means ranked higher of importance.

Question 3

**Will the level of professional education preparation of nurse practitioners impact how a nurse practitioner will prioritize assessment of breast health knowledge among the marginalized woman?**

The respondents were overwhelmingly master's prepared or greater (97.6%).

This disparity most likely reflects the results of the Tennessee legislative mandate that all advanced practice nurses are masters prepared. Therefore, this research question will not be able to be calculated using this population.

The next chapter will discuss these results, the strengths and limitations of the study, the implications for nursing practice and suggestions for further research with marginalized women.

## CHAPTER V

### DISCUSSION

The purpose of this study was to ascertain how nurse practitioners prioritize teaching in an aggregate population. The sample of nurse practitioners studied were employed in the East Tennessee region of the United States and were awarded a Certificate of Fitness registered with the state of Tennessee in order to have prescriptive privileges. The nurse practitioners studied were employed in the public and private sectors. The null hypothesis was that no significant difference would emerge in how nurse practitioners would prioritize breast health teaching as opposed to other women's health teaching in various aggregates of marginalized woman.

A significant difference was found between the groups of nurse practitioners when one compares those in public vs. private practice and when one compares practitioner specialty of family vs. women's health nurse practitioners. Overall, the public health setting nurse practitioners as compared to private health setting nurse practitioners and the women's health nurse practitioners as compared to family health nurse practitioners would tend to promote the importance of clinical breast examination as a higher priority than other health teaching. However, there appears to be no significant differences between the groups compared in regards to the promotion of breast self examination and mammography.

The responses to the vignettes by all the nurse practitioners documented a disparity when comparing the identifying factors portrayed in the vignettes. This

incidental finding revealed that nurse practitioners would promote breast health more highly among African-American, Lesbian, and Hispanic women. But in regards to the lower ranking of breast health promotion in the vignettes describing HIV positive women and homeless women, nurse practitioners rated other necessary and appropriate health teaching as described in the twelve education selections as more important than breast health teaching when no specific chief complaint was identified in the vignettes.

### Strengths and Limitations of the Study

Various strengths can be appreciated in this pilot study, such as the high rate of response to the study questionnaire by the nurse practitioners queried. It is encouraging to note that many vitally busy nursing professionals took the time to participate in this study and made evident their commitment to advancing nursing science. Their responses in this pilot study will, hopefully, raise other research questions and birth further studies in order to call attention to women who are “perpheralized on the basis of their identities, associations, experiences, and environments” (Hall, Stevens, and Meleis, 1994). Marginalized women are not adequately assessed, treated and followed appropriately by health professionals for a number of complex reasons. This study adds to the literature and sheds light on promotion of women’s breast health.

The data collected were normally distributed and the measurement was on an interval scale; therefore, parametric statistical analyses were applied. This

allowed for more robust statistical analysis utilizing the repeated measures analysis of variance. Therefore, inferences about the data results can be made.

Several limitations of the study emerged during the course of data collection and interpretation of the results should be made with caution. To begin, this study appears to be the first to examine how a sample of nurse practitioners prioritizes health teaching among marginalized women. As such, one should view it as a pilot study; therefore, the generalization of this study is not applicable at this stage of the research process. As a pilot study, it is difficult to compare the results with other studies.

The sample size presented another potential limitation. The expected goal of recruiting nurse practitioners from fifty public practice settings and fifty private practice settings was not achieved, and the response rate of the two groups was unequal (public,  $n = 36$ ; private,  $n = 113$ ). In addition, a balanced representation of family, adult, and women's health nurse practitioners was also not achieved and due to the very small number of adult health nurse practitioners recruited it was necessary to withdraw them from the data analysis (family,  $n = 106$ ; women's,  $n = 30$ ; adult,  $n = 15$ ). This disparity among the specialties may, however, be representative of the general nurse practitioner population by specialty.

Lacking an appropriate tool for study, "The Ranking of Health Promotion by Nurse Practitioners," was developed by the investigator since this study was the first to examine prioritization by nurse practitioners of breast health promotion among marginalized women. Further testing of the tool would help to ensure appropriate



application to a large scale study in order to further explore breast health prioritization among specific populations.

Two of the nurse practitioners responding to the tool stated that they had difficulty answering the survey. One stated, "I treat patients as individuals" and had difficulty with the concept of teaching when limited to aggregates. Other participants may have had the same difficulty with being "forced" to rank order teaching. This "forced ranking" to prioritize teaching may be a limitation in this study.

#### Implications for Nursing Practice

The results of this pilot study do have implications regarding differences in practice settings and also differences within nurse practitioner specialties. The health teaching that nurse practitioners provide often is more frequently provided to affluent groups due to their frequency of interaction with a health care provider (Stevens, 1992). However, in this study, the nurse practitioners working in the public health setting highly rated the importance of breast health promotion with a clinical breast examination. Those nurse practitioners working in public health settings may promote the importance of clinical breast examination more highly than those in private practice. The clinical significance of this finding suggests that in the public health setting nurse practitioners are more likely to minister to transient populations who may not be aware of the American Cancer Society guidelines regarding the importance of annual breast examinations by a health care

professional. In addition, if nurse practitioners are successful in convincing women to return in a year for an annual breast examination and mammography the women can also be offered other important evaluations and annual screenings, such as blood pressure screening, Pap smear, colon cancer screenings, etc. This higher ranking of the importance of a clinical breast examination demonstrates that nurse practitioners are aware of the fact that women of limited financial resources, as depicted in the vignettes, are less likely to have annual clinical breast examinations as studied by Frazier, et al. (1996) and Wyn, et al. (1996).

There was a significant difference between the promotion of clinical breast examination between the women's health and family health nurse practitioners. This finding parallels the study produced by Lane, et al. (1996) who found that women who seek health care from a gynecologist rather than a general practitioner for routine health examinations were more likely to have mammograms. Women's health nurse practitioners are more likely to promote an annual breast examination according to these study findings. Women's health nurse practitioners are more clinically focused on the assessment of the breast and gynecologic health just by virtue of their specialty focus and may also be more likely to offer additional gynecological health evaluations.

The ranking of homeless women was low possibly due to the fact that the nurse practitioners might assume that there would be no way to follow these transient women even in the event that their clinical examination or mammogram was abnormal. The compounding factors related to a lack of financial resources,

such as nutritional needs, routine medical screenings, and access to health care in the event of acute illness, leaves the nurse practitioner with a plethora of educational needs that he or she may believe are essential to address first with the homeless population. In addition, women who are homeless or HIV positive have many physical and psychological needs, needs that may be helped by comprehensive health teaching. Another implication for nursing practice is that there is a clear necessity for additional time to interact with the HIV positive and homeless population, in order to ensure that breast health teaching can be included in health visits according to American Cancer Society recommendations. The adherence to incorporation of appropriate breast health screenings within this population does not appear to have been studied and therefore a comparison to previous research is unavailable.

In this study, it became apparent the nurse practitioners would prioritize teaching according to identity, such as women being identified as HIV positive or as homeless. Despite the comment made by one nurse practitioner regarding treating all patients as distinct individuals, this study demonstrates that in an aggregate set of women, other teaching may take priority due to a stigmatizing disease or an environmental factor, such as homelessness. These findings demonstrate that for some aggregates breast health teaching will be given a lower priority due to an identifying factor. Hall and researchers question, "how do hierarchical power dynamics affect the health of stigmatized groups?" (1994, p. 35) This study begins to unravel this mystery since these findings suggest that health care providers place

other important health promotion information on a higher or lower priority on the basis of cultural identities. Even when referring to the five vignettes describing women who could be considered marginalized, there is evidence that women who are homeless or HIV positive are comparatively least likely to get breast health information. The findings of this study lend support to the theory that assumptions of the dominant cultural majority are probably also played out in clinical practice decisions of advanced practice nurses.

#### Suggestions for Future Study

The prioritization of the numerous educational needs for the HIV positive woman and the homeless woman can decrease the importance of breast health education. Future studies should address the issues of health teaching among women with complex teaching requirements. However, this particular group of women should not be denied the breast health education other women are provided. For example, to increase breast health awareness, health care professionals should specifically target these populations. Further study could address the impact of breast health teaching on homeless and HIV populations, possibly in a prospective study. A literature review of marginalized women in this category was non-existent. How can health care professionals effectively reach populations of marginalized women? Further studies should address appointment time extensions with these women to assess breast health teachings overall success. This study also raises the question of whether the lower prioritization of breast health teaching might be due

to an expectation, on the part of the health care professional, that there will be a lack of follow-up with the patient if an abnormal examination is noted in women with limited means.

As stated by Hall, et al. (1994) "by examining the margins, nurses can gain knowledge about the whole that has previously been unavailable to us." Future research should focus on perimenopausal or menopausal marginalized women and their perception of prioritization of breast health promotion. Once a nurse practitioner has informed women of the importance of the ACS guidelines, will this increase women's likelihood of following the American Cancer Society guidelines? It is important to research the perceived barriers marginalized women face. In an interview fashion, one can study the value this cohort of women will place on good breast health. The studies presented in Chapter Two focused on identifying factors such as race, socioeconomic, culture, and lack of English language skills. More studies need to focus on other identifying issues, such as a stigmatizing disease, homelessness, and sexual orientation.

In future research, the survey instrument developed for this study should include the identification of the nurse practitioners gender in the demographic section. This may prove informative to identify if gender differences exist. Gender identification of the nurse practitioners could be clinically significant to study in the education of breast health in order to determine if gender biases prevail in the teaching of breast health.

## Conclusion

The differences that emerged between the promotion of clinical breast examination within public and private settings where nurse practitioners often work are indeed important. Public practice nurse practitioners often see women on an irregular basis but the promotion of annual examinations will hopefully ensure that women will receive health care screenings on a more consistent basis. Women who receive health care screenings from a private practice setting nurse practitioner tend to be in contact with a regular health care professional and important annual screenings will not be overlooked.

Women who are homeless and women who are HIV positive often require nurse practitioners to place other necessary health teaching as a higher priority. Usually the immediate needs will have to be addressed first, such as immunizations. As nurse practitioners encounter this special group of women, hopefully the importance of additional time will be offered women so more in-depth health teaching can be conducted, such as breast health awareness.

The differences between mainstream and marginalized women become apparent when looking at the statistics among minority status, socioeconomic status, and education level. Breast cancer knows no boundaries or limitations. Health care professionals and researchers must make conquering breast cancer a personal campaign. As stated best by Mickey, et al. "a well-coordinated community effort, with cultural sensitivity, is needed to save lives from breast cancer" (1995, p. 475).

Since breast cancer is unpreventable, the next defense is early detection for all women.

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## APPENDICES

## APPENDIX A

Dear Nursing Professional

I am a graduate nursing student at University of Tennessee, Knoxville, and would appreciate ten minutes of your valuable time to complete this survey for my thesis. The purpose of this study is to determine how nurse practitioners rank order needed health information for certain populations (not illness related). The beginning of the survey will question you about some personal information. After the demographic section, five vignettes are presented about women who are seeking health care. Twelve health guidelines will be presented with each vignette for you to rank order according to the patient presentation. Even though you may feel all are important to address with the patient visit, please rank order according to what you would talk about with the patient first.

Completing this survey will benefit you and the nursing profession by gaining more understanding of how nurses prioritize teaching to women with multiple health and education needs. There is no risk to you since your identity, position, and employer will be kept confidential without any identifying marks or information on the surveys or envelopes. By completing this survey, you understand that you are volunteering and there will be no payment involved. Your clinical judgement and expertise is highly regarded in order to complete this study. I appreciate your input into this study.

I can be reached for questions at (865) 974-7634, e-mail: [cwilso12@utk.edu](mailto:cwilso12@utk.edu), or mail to University of Tennessee, Knoxville, College of Nursing, 1200 Volunteer Blvd., Knoxville, TN 37996-4180.

Sincerely,



Candy Wilson, RNC, BSN  
University of Tennessee, Knoxville  
Graduate Nursing Student



Patricia Gentry Droppleman, PhD, RN  
University of Tennessee, Knoxville  
Thesis Chairperson

## APPENDIX B

Age:

Please circle the answer that best fits you:

Marital Status:

Single

Divorced

Married (Partnered)

Widowed

Position:

Staff Nurse

Clinical Nurse Specialist

Nurse Practitioner

Management

Other: \_\_\_\_\_

Education level:

Diploma

Master

Associate

Doctorate

Bachelor

Area of specialty:

Family Practice

Adult Health

Women's Health

Other Advanced Practice Nursing Specialty: \_\_\_\_\_

Type of practice:

Private Practice

Public Health

In your facility, what educational information do you display?

1. Immunization schedules
2. Nutrition information
3. Benefits of exercise
4. Smoking cessation
5. Heart disease prevention/regular blood pressure screenings
6. Osteoporosis information
7. Mental health information (i.e. depression)
8. Information about Pap Smears
9. Breast self-examination
10. Mammography
11. Other: \_\_\_\_\_

Other than you personally distributing information to the clients, how does your facility provide education?

1. Pamphlets in English
2. Pamphlets of several languages
3. Videos
4. Posters



Below are vignettes describing special groups of women. In the scenarios, these women are coming to you for care for routine examination. Your clinic is conducting free medical examinations for the day to specific populations and the women come to you for this service. You are hypothetically given thirty minutes with each person. You have unlimited resources for the day to care for these women without cost to them or the clinic. They currently do not complain of any acute illness and you do not find any evidence of disease on your examination. All of these women are in need of the education following the vignette and are at risk for the sequelae of nonadherence. Even though all of the health promotion/disease prevention measures are equally important, in what order would you emphasize your health promotion teaching? (Rank order by number)

1. **A 50-year-old postmenopausal African American woman comes to the office with two of her grandchildren over whom she possesses custody. She heard about the health screenings from a neighbor who saw the flyers. She reports that the last time she saw a health care provider (HCP) was five years ago when she broke her foot by falling through the porch floor of her tattered house she is renting. She says that she does not receive any health care benefits from the state. The woman is clean, but her clothes are out of date and do not match. You can offer her any resources today at no charge to her or your clinic.**
  - a. Immunizations\_\_\_\_\_
  - b. Nutrition Concerns and Information\_\_\_\_\_
  - c. The importance of regular exercise\_\_\_\_\_
  - d. Smoking cessation\_\_\_\_\_
  - e. Weight Reduction\_\_\_\_\_
  - f. Heart disease prevention/regular blood pressure screenings\_\_\_\_\_
  - g. Osteoporosis prevention\_\_\_\_\_
  - h. Mental health screenings/interventions\_\_\_\_\_
  - i. Provide a Pap smear and give information on the importance\_\_\_\_\_
  - j. Information on breast self examination\_\_\_\_\_
  - k. Provide a clinical breast examination and give information on the importance\_\_\_\_\_
  - l. Schedule a mammography\_\_\_\_\_
  
2. **A Caucasian woman who lives on the streets enters the clinic and sits down in the waiting room. She heard about the free services from people on the street. She cannot recall her last examination by a HCP. She states she is reluctant to give any information about nearest relatives and appears scared. She appears to be in her late forties. She has an unkempt appearance.**
  - a. Immunizations\_\_\_\_\_
  - b. Nutrition Concerns and Information\_\_\_\_\_
  - c. The importance of regular exercise\_\_\_\_\_

- d. Smoking cessation\_\_\_\_\_
  - e. Weight Reduction\_\_\_\_\_
  - f. Heart disease prevention/regular blood pressure screenings \_\_\_\_\_
  - g. Osteoporosis prevention\_\_\_\_\_
  - h. Mental health screenings/interventions\_\_\_\_\_
  - i. Provide a Pap smear and give information on the importance\_\_\_\_\_
  - j. Information on breast self examination\_\_\_\_\_
  - k. Provide a clinical breast examination and give information on the importance\_\_\_\_\_
  - l. Schedule a mammography\_\_\_\_\_
3. **A 45-year-old HIV positive, Caucasian woman comes to the clinic through the urging of her Infectious Diseases doctor. She is on public assistance for the disease, but continues to work outside the home at minimum wage. She has very limited personal resources. Her children are grown and she lives alone. The last health maintenance complete physical was before she was diagnosed with the disease seven years ago. She can't recall her last eye or dental examination.**
- a. Immunizations\_\_\_\_\_
  - b. Nutrition Concerns and Information\_\_\_\_\_
  - c. The importance of regular exercise\_\_\_\_\_
  - d. Smoking cessation\_\_\_\_\_
  - e. Weight Reduction\_\_\_\_\_
  - f. Heart disease prevention/regular blood pressure screenings \_\_\_\_\_
  - g. Osteoporosis prevention\_\_\_\_\_
  - h. Mental health screenings/interventions\_\_\_\_\_
  - i. Provide a Pap smear and give information on the importance\_\_\_\_\_
  - j. Information on breast self examination\_\_\_\_\_
  - k. Provide a clinical breast examination and give information on the importance\_\_\_\_\_
  - l. Schedule a mammography\_\_\_\_\_
4. **Two lesbian women come to the clinic after hearing about the free care from a local "Lesbian Rights" meeting. These women live together and work at a local restaurant and do not have much money. They go to the HCP when they are sick and pay cash for the care received. One of the women is 48 and the other is 49 years old. They report understanding the importance of having health screenings, but have not completed physicals for more than ten years due to financial burdens**
- a. Immunizations\_\_\_\_\_
  - b. Nutrition Concerns and Information\_\_\_\_\_
  - c. The importance of regular exercise\_\_\_\_\_
  - d. Smoking cessation\_\_\_\_\_
  - e. Weight Reduction\_\_\_\_\_

- f. Heart disease prevention/regular blood pressure screenings \_\_\_\_\_
- g. Osteoporosis prevention \_\_\_\_\_
- h. Mental health screenings/interventions \_\_\_\_\_
- i. Provide a Pap smear and give information on the importance \_\_\_\_\_
- j. Information on breast self examination \_\_\_\_\_
- k. Provide a clinical breast examination and give information on the importance \_\_\_\_\_
- l. Schedule a mammography \_\_\_\_\_

**5. A 55-year-old migrant Latino woman comes to the clinic after seeing the flyer on a bulletin in her ethnic neighborhood. She uses part of her grocery money to catch the bus to come to the clinic. She has only been in the U.S. for one year and speaks broken English. You have a translator in the office. She reports that she went to the emergency room about a year ago for pneumonia and has had a full recovery. Otherwise, she does not go to a HCP for routine care.**

- a. Immunizations \_\_\_\_\_
- b. Nutrition Concerns and Information \_\_\_\_\_
- c. The importance of regular exercise \_\_\_\_\_
- d. Smoking cessation \_\_\_\_\_
- e. Weight Reduction \_\_\_\_\_
- f. Heart disease prevention/regular blood pressure screenings \_\_\_\_\_
- g. Osteoporosis prevention \_\_\_\_\_
- h. Mental health screenings/interventions \_\_\_\_\_
- i. Provide a Pap smear and give information on the importance \_\_\_\_\_
- j. Information on breast self examination \_\_\_\_\_
- k. Provide a clinical breast examination and give information on the importance \_\_\_\_\_
- l. Schedule a mammography \_\_\_\_\_

Thank you again for taking time to complete this survey. Your input is imperative to the completion of this study.

## APPENDIX C

County Executive  
Thomas Schumpert



## Knox County

Department of  
Public Health

August 9, 1999

Candy Wilson, RNC, BSN  
6043 Warren park Lane  
Knoxville, Tennessee 37912

Dear Ms. Wilson:

Thank you for sending me a written proposal of the survey you wish to do for your Master's thesis.

I will be happy to assist you with this project. If you will send the survey forms, I will distribute them to the appropriate nurse practitioners.

Your project sounds interesting and I will be interested in the results obtained. Please let me know when the tool is ready and perhaps we can review it together, in case there are any questions from my staff.

I look forward to hearing from you soon.

Sincerely,

A handwritten signature in cursive script, reading "Bea Emory".

Beatrice L. Emory, R.N., M.P.H.  
Clinical Services Administrator

BE/lw



140 Dameron Avenue • Knoxville, TN 37917-6413 • (423) 215-5000 • TDD (423) 215-5005 • Fax (423) 215-5295

**SEVIER COUNTY HEALTH DEPARTMENT**

Tennessee Department of Health - Cooperating

P. O. Box 4648

Sevierville, Tennessee 37864

453-1032 - 423-637-6853

January 20, 2000

Candy Wilson, RNC.BSN  
6043 Warrenpark Ln.  
Knoxville, TN 37912

Dear Ms. Wilson:

I received your request for support in completing a survey of how nurses prioritize teaching to women with multiple health and educational needs.

Please send three copies. I will distribute them to the nurse practitioners.

Sincerely,



Priscilla Garner  
District Director

PG:dh

survey's nurse practitioners

**Subject:** survey's nurse practitioners

**Date:** Mon, 24 Jan 2000 10:22:46 -0500

**From:** "Overton, Constance" <ConstanceO@exch.HamiltonTN.gov>

**To:** "cwilso12@utk.edu" <cwilso12@utk.edu>

Candy,

Listed below are the nurse practitioners that work for the Hamilton County Health Department and their addresses:

Mildred Geeter  
Chattanooga-Hamilton County Health Department  
921 East Third Street  
Family Health Clinic  
Chattanooga, TN 37403

Barbara Graham  
(same as Mildred's)

Nancy Hale  
Sequoiah Health Clinic  
9527 Ridgetrail Road  
Soddy Daisy, TN 37379

Sheryl Ammons  
Ooltewah Health Clinic  
5520 High Street  
Ooltewah, TN 37363

Melanie Magoon & Ardyce Ridolfo  
Homeless Health Care Center  
727 East 11th Street  
Chattanooga, TN 37403

Constance Overton  
Chattanooga-Hamilton County Health Dept  
(423) 209-8218  
ConstanceO@exch.HamiltonTn.Gov

*McMinn County Health Department*

P.O. BOX 665  
ATHENS, TENNESSEE 37371-0665

TELEPHONE: (423) 745-7431

February 16, 2000

Candy Wilson, RNC, BSN  
6043 Warrenpark Ln.  
Knoxville, Tn. 37912

Dear Ms. Wilson:

In response to your e-mail, I am writing this letter to give you permission to send surveys to our practitioners to answer questions for your research project. The subject is excellent and, as I said before, I would like to see a summary of your results.

If I can be of any further assistance, please let me know. Thank you.

Sincerely yours,

*Sally Blackwell, R.N.*

Sally Blackwell, R.N.  
Nurse Manager



458-2514  
Fax 458-8587

*Loudon County*  
*Department of Health and Environment*  
210 River Road  
P.O. Box 278  
Loudon, Tennessee 37774

458-2662

January 12, 2000

Candy Wilson, RNC,BSN  
6043 Warrenpark Lane  
Knoxville, Tn. 37912

Dear Ms. Wilson:

I have talked with our Nurse Practitioner, Linda Hensley, and she said she would complete the survey for you.

Sincerely,

  
Nancy Foshee, County Director

## Hawkins County Department of Health

P.O. BOX 488  
ROGERSVILLE, TENNESSEE 37857



P.O. BOX 209  
CHURCH HILL, TENNESSEE 37642

Barbara J. Skelton, MD, FAAP  
Hawkins County Health Dept.  
PO Box 488  
Rogersville, TN 37857  
January 12, 2000

Candy Wilson, RN  
6043 Warren Park Lane  
Knoxville, TN 37912

Dear Ms. Wilson:

*As Health Officer for Greene and Hawkins counties, I give approval for you to send surveys to collect data for research on nurse practitioner prioritization to the following nurses. I will let them know that you will be contacting them and ask them to respond as their work schedules allow. If I can be of any assistance, do not hesitate to contact me.*

Greene Co. Health Dept. - Mary Vance, MSN, FNP, CS  
Jenni Metcalf, RN, FNP

Hawkins Co. Health Dept. - René Pippin, MSN, CS, FNP  
Kay Elkins, RN, FNP (does FP in Hancock Co. also)

Sincerely,

Barbara J. Skelton, MD

cc: Charlene Jessee, RN  
Mary Vance, RN  
Jenni Metcalf, RN  
René Pippin, RN  
Kay Elkins, RN

Candy Wilson was born in Saginaw, Michigan. She attended several public schools in Michigan before her family moved to Bowling Green, Kentucky. In Bowling Green she graduated from high school at Warren Central High School in 1983.

In 1985, she married David Wilson in Bowling Green and moved to Fort Walton Beach, Florida. There she attended Okaloosa Walton Community College and received an Associate of Arts degree in Business Administration. After her husband separated from the Air Force, they returned back to Bowling Green and she continued her academic endeavors and completed a Bachelor's of Science in Nursing in 1992 from Western Kentucky University.

Upon graduation, she was commissioned into the United States Air Force as a Second Lieutenant. She has been stationed at 96 Medical Operations Squadron, Eglin Air Force Base, Florida and later at 3 Medical Operations Squadron, Elmendorf Air Force Base, Alaska. In the Air Force she has gained experience as a labor & delivery, newborn nursery, post partum, and gynecological surgery nurse.

Candy is certified in Inpatient Obstetrics and Fetal Heart Monitoring through National Certification Corporation (NCC). She is a Red Cross Nurse and certified in the Healthy Pregnancy Healthy Baby program as an instructor and instructor trainer.

Affiliations include Association of Women's Health, Obstetrics, and Neonatal Nurses (AWHONN), Northern Lights Chapter, served as Education Coordinator; Sigma Theta Tau, Gamma Chi Chapter, served on the local board.